### THE STUDY AND PRACTIC'S CANOGA.

## By the same Author ABOUT YOGA—THE COMPLETF PHILOSOPHY

# THE STUDY AND PRACTICE OF YOGA

#### HARVEY DAY



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#### CHAPTER I

#### INTRODUCTION

SINCL the publication of About Yoga so many readers have expressed interest in an instructional book that my publisher has been good enough to ask me to attempt another work that will take them one step farther into uncharted country.

Frankly, I doubt my ability to do so. I am not a yogi. I do not profess to be an expert. I cannot levitate my body in space as some profess to be able, nor can I teach others such tricks. I cannot tie myself into knots as contortionists, ballet girls and yogis can, who have given a lifetime to such practices. Never have I enjoyed a lunch composed of razor blades, two-inch nails and crisp bits of broken glass washed down with nitric or prussic acid. I can't wash my face in broken glass or hang by my neck from the limb of a tree as a gentleman in Hampstead does. I do not enjoy reclining on a bed of sharp nails and I am absolutely hopeless when it comes to gazing into the future and giving the name of the animal that will win the Derby, St. Leger or the Oaks.

I confess it. I must be a dreadful disappointment to my friends, my readers and those who look to me for guidance. I don't even impress my wife. Not that I try to—at least, not after a few unsuccessful attempts many years ago.

But there seem to be a few simple things I can do and which lie within the power of all normal persons. These I shall try to explain. Some readers will, I hope, benefit.

I stated in my first book that in my youth I had suffered badly from malaria, which early on affected my eyes and teeth. Fortunately, I managed to gain health.

My early excursions into yoga were haphazard. I did not sit at the feet of a guru (teacher) but picked up scraps from various adepts as I went along. Not the best way of gaining a grasp of any subject. As I learnt, I sifted and rejected that which did not appeal to my reason; read widely on the subject, spoke with those who knew more than I did, synthesized my knowledge, and ultimately practised such parts of the philosophy as were most useful to me. Perhaps those who read this book will benefit from my mistakes.

My main quarrel with those who expound yoga to the layman is that very quickly they grow dull, vague, prolix, and use phrases which I am sure they do not understand. When I was much younger I used to pore over these clever books, wade through dictionaries to find the meanings of obscure words, and in the end I was not much wiser. I am sure they imparted much valuable information, but I was so dull that I could not understand or benefit.

Perhaps this lack of understanding is the reader's fault, for sometimes people read articles of mine on yoga and then sit down and write me reams about God. Why, I don't know, for yoga is neither religious nor non-religious. A member of any religious denomination can practise yoga with a clear conscience, for none of its teachings runs counter to those of known religions. Let me state quite plainly that if you are an agnostic, atheist or rationalist, yoga will not require you to believe in a deity; nor will it require you to reject the idea of a deity if you do believe.

The aim of yoga is to develop Man to the highest pitch of perfection, and the state he ultimately reaches depends entirely upon his mental capacity, his will to develop physically, mentally and spiritually, and the amount of intelligent effort he puts into his work. You should not join a club or society to study yoga. It is an individual study and its benefits can best be attained when studied alone, even in the privacy of a humble little bed-sitting-room tucked away in some mean back street.

A woman asked me recently, "What can yoga do for me?" and was taken aback when I said abruptly, "Nothing." Then, seeing that she looked discouraged, I added quickly, "Yoga can do nothing; but you can help yourself by reading about and practising yoga."

You may buy this book and read it from cover to cover and though you will, I hope, get some ideas, you will get no other benefits unless you put your back into the study and practise yoga. It is a practical philosophy.

Most people want something for nothing. Thus the popularity of the football pools. Some will even put in a little effort and expect it to pay dividends for ever, like perpetual motion. But any scientist will tell you that there is no such thing. Because people want something for nothing—for all I know you may be one—thousands are able to sell postal courses and make a fat living.

I know a man who ran a prosperous school of journalism. "I make a living," he once confessed, "like Mr. Colman—by the mustard that people leave on their plates." Every year 2,000 students enrolled with him at a fee of seven guineas, payable in advance. The course had twelve lessons. Most of the poor chumps who took it imagined that by some magic they would become best-sellers after the first lesson; but that very lesson bogged down 50 per cent., who went down and never even came up for air. The work was hard and students kept falling by the wayside. About twenty students finished the course each year, and not more than three out of 2,000 eventually became writers.

After paying all expenses, my friend made a good living. He was an honest man. His course was good, for he had been the editor of a London daily and wrote readable stories. He was willing to take every student through the course, but few—very few—were willing to work hard.

People are willing to do almost anything in the world to achieve success—except hard work.

If you are one, throw this book into the fire and let us part company straight away. Nothing is worth achieving unless it calls for some sacrifice and effort. But if you've got a backbone instead of a wishbone, carry on.

Yoga has three main aims. The first is to develop the body till it is so fit that you need not concern yourself about it. The kind of yoga I'm going to tell you about won't give you massive muscles or the strength to lift heavy weights above your head, but unless you are a chronic invalid with one foot on the brink of the grave and the other on a banana skin, you'll gain health, vigour and endurance. "Miracles" are outside the scope of this book, and what is more, according to Patanjali, yogis are discouraged from using or exhibiting occult powers.

It must be patent to all that it is difficult to apply your mind to any subject if your body is troubling you. Many, by sheer will-power, have overcome physical disabilities. Walter Wren, who became M.P. for Wallingford, was crippled by a spinal accident while at Cambridge. Despite the fact that he had to lie all day on a couch he took his degree after eight years, started a coaching school for Civil Service examinations specializing in the Indian Civil Service. In forty years he coached more than 50 per cent. of all who went to India in the Civil Service and his establishment was the most famous in Britain.

Arthur Kavanagh was a mere trunk—not a whole man. His legs ended at the knee; his arms at the elbow. Yet he

rode to hounds strapped in a chair, taking walls and fences. He learnt to drive a pair of spirited horses in a tandem, was a good shot, an enthusiastic yachtsman and angler, could paint, draw well, and wrote a clear bold "hand." When he was 17 he acted as a volunteer scout during the Smith O'Brien Rebellion in Ireland. At 18 he journeyed through Persia, thence to Bushire and India, where he hunted big game and tigers. His money ran out, so he earned some by carrying official dispatches in the Aurungabad district, and later obtained a good post with the Survey Department in Poona.

Returning to Ireland he drew such excellent plans for building that he gained the Royal Dublin Society's medal. He became a magistrate, married, and raised a large family; was appointed High Sheriff of County Carlow, Chairman of the Board of Guardians, became M.P. for Wexford and gained a reputation as a speaker. He also sat on the Bessborough Commission, was Secretary of the Irish Land Committee, a member of the Property Defence Association, and founded the Land Corporation. Finally, he became a member of the Irish Privy Council. Not bad for a man with neither arms nor legs.

History is spattered with cases of men who have achieved great things despite severe physical handicap. How much more might they have achieved had they been fit men?

Had Mr. Churchill been an invalid could he have borne the enormous burden of the war years? Illness impaired Mr. Attlee's efficiency and put Sir Stafford Cripps clean out of public life. So the first aim of yoga, that of making the body fit, is just sheer common sense.

The second aim is mental efficiency. This does not mean that yoga can give you a better brain than you already have, but it does mean that by practising yoga exercises conscientiously you will be able to get better results from your brain.

Remember: you can do these things—not yoga. Yoga is merely the instrument, and the effectiveness of any instrument depends upon the skill and power of the wielder. I use a cut-throat razor because I like a clean shave. In the hands of a novice it might prove a lethal weapon. It is only by constant, intelligent use that one becomes a craftsman.

The results of yoga are not automatic. They will not descend on you in a shower the moment you have turned the final page of this book. When you have read it once you will have to read it again, and then re-read it in bits and pieces, and carry out the advice and instructions set down.

As you read, I want you to be critical. I have no desire that you shall swallow all I say. There are reasons for all I tell you to do, and I shall try to give them to you. Unless you learn to develop your critical faculties and your reasoning powers, and inquire into the nature of things, you will be but little better than the lower animals. A certain amount of belief will be necessary, but only of a kind based on experience. I know that if I go to Paddington at a certain hour, buy a ticket at a specified price and step into a train advertised to reach Oxford an hour and a half later, I shall get there in no more than two hours, British Railways and God willing.

I ikewise, you know that if you step on one edge of an iron hoop left carelessly on the ground, the odds are that the other side will rise sharply and crack you on the tibula with such violence as to bring tears into your eyes and fill your being with wrath against the boob who left it there.

Yoga teaches you, by dint of long and hard practice, how to concentrate on any object for at least two seconds. That itself is a feat. Concentration is necessary for material success in most spheres of life. If you can concentrate easily examination will present little difficulty; you can tackle a difficult problem and rip the kernel out of it; you can

memorize, learn languages. But all this will be easier if first your body is fit and you don't suffer from migraine, stomach ulcers, rheumatism or some other distracting complaint.

Many who read this are unable to concentrate on any subject. Their thoughts jump about like grasshoppers. The mind should be like a bee; it should alight on one flower, suck the nectar from it and then go to another. Once you can concentrate, your mind retains facts and impressions, and almost before you realize it you have a sound memory.

These two benefits alone are worth while: but there is a great deal more. Yoga teaches you to think clearly. Most of the trouble in the world is due to the fact that people believe everything they see in the newspapers, or are told by doctors, scientists, politicians, speakers on the radio, EXPERTS, and all with some semblance of authority.

I wish to sow suspicion in your soul; to make you develop a critical attitude, so that you will examine everything I set down in this book, and if it does not appeal to your reason, reject it. There is too much credulity in the printed word. Advertising, propaganda, the radio, newspapers, IV have converted us into sheep with two legs.

All my life I have been a rabid sceptic. Only through honest scepticism can one hope to get at the truth Because a man has M.D., D.D., or LL.D after his name, it doesn't mean that he knows everything. How do you know that the letters don't stand for Maisey Dotes, and Dosey Dotes, and Little Lamsey Divey?

Yoga makes for clarity of thought and a logical mind.

It helps you to master and not a main a slave to your emotions, so that you can banish worry, fear, anger, hate and anxiety, and all other human emotions that tear your mind to shreds and rack your body Before the waf I knew of a man who made a fair income by fitting people with spectacles. They went to him because he had the letters M.O.R.F. after his name, which they imagined was the abbreviation for some optical diploma. Eventually, a customer whose eyes he damaged with drugs prosecuted him and it was revealed that the letters stood for Member of the Royal Fusiliers, to which ancient corps he once belonged. He left the court a free man, for he had not practised under false pretences!

So don't allow yourself to be deluded by a façade of respectability or highfalutin titles.

The third benefit you can give yourself by practising yoga is spiritual development. Here I am not writing about "spirit" in any religious sense. Frankly, I don't know exactly what it is. It may be a condition wrought by internal or external influences, or a combination of both. But it is a condition that exists. At times one feels an extraordinary elevation or depression, which is not merely the result of something you have eaten, some feat you have achieved, or the condition of your surroundings.

The Bible speaks of "a peace that passeth all understanding." Yogis call it Samadhi. Perhaps it is a one-ness with the universe, of which this world is only a part. Because Man has always had to fight for his existence he regards the world and all creatures made in a different mould as his enemies; also the forces that control and tear it. A mastery of yoga, even so small a crumb as I have mastered, enables one to feel that these influences are friendly; that the wind, the waves; fire and water; the animals, birds and serpents are all friends.

The yogis believe it. They walk the jungles unharmed. The heat that gives you sunstroke, the frost that chills your marrow; these do not disturb yogis.

· In this book I do not pretend to tell you how to become

a yogi. Indeed, it is impossible to become one without going to India and sitting at the feet of the masters. Though the orbit of this work is limited, there is no harm in telling you about some of their practices.

In some orders—for there are various orders of yogis in India—a man or woman who wishes to become a yogi goes first to the police station for a certificate to prove that he is not a known criminal. Then he becomes a disciple of some local yogi. After initiation ceremonies are performed the candidate is confined to a strict routine for a period ranging from forty days to six months or even more. This is to test him physically and mentally. Throughout this period his guru (teacher or master) stresses the difficulties of such a life and the many pitfalls that await him.

If after this preliminary period the guru is satisfied that the initiate is a fit subject he makes him undergo a short fast of from three to four days. Then the pupil takes vows that he will not engage in trade or take employment; that he must not keep or use lethal weapons; nor grow angry when abused or ill treated. He must not marry. There are, however, exceptions to this last rule, for some orders allow marriage and even accept women.

Then the various traditional rites are performed. At this stage the newcomer is accepted as a disciple and his period of service begins. This period may last from twelve to twenty years or more. He is expected to trace some holy river, preferably the Ganges, to its source; then travel from the source to the mouth along one bank and then back to the source along the other. During this jou ney he will pass through country of every variety; through large towns and small; through villages and hamlets; and through deserted towns where no human beings abide. He will travel unarmed through jungles abounding in wild beasts. The train will wash him, the sun heat his bones and then snows

will freeze him to the marrow. All this and more he must experience.

Each day he must move on. To those who extend their hospitality he must offer his services. He may be the guest of a rajah one night, with a retinue of servants to wait on him, and the next he may share a mud-walled thatched hut with a peasant, or even lie in the open under the shade of a neum (margossa) tree.

He will come across eminent yogis, sit at their feet and gather wisdom, and if at any time he can help a human being or animal in distress he is bound to do so. His life is dedicated to the service of mankind.

Many disciples never complete this tough apprenticeship. Some are eaten by wild beasts; others drowned while crossing rivers; many are carried off in the epidemics that sweep the country.

After each journey, which may take years, the disciple visits a monastery in the Himalayas or some remote place, for study and thought.

Needless to say, all yogis do not follow this golden rule. Some, having obtained a little power, set up for themselves in a town or village and by virtue of their "holiness" batten on the credutous, ignorant people.

The task of the disciple is to gain knowledge of every type of human being and to taste life in all its forms; good as well as evil. They believe in good as well as evil. Without evil there could be no good. They do not try, like Christians, to fight against evil or run away from it. They recognize it for what it is and act accordingly.

An old yogi once told me that clergymen should go down on their knees and thank heaven for the Devil, for without him they would all be out of jobs. In any case, the world would be a dreadfully humdrum place without Beelzebub. The Church builds a rampart between the righteous and the ungodly; between good and evil; and there is at least one Church that believes in Original Sin.

Yogis try to probe the meaning of life and the nature of things. Sin is a condition of the mind. There is a reason for it. Wipe out that reason and sin ceases to exist in that particular case. They realize that one can succeed only by humility, by questioning, and by digging down. Their approach is a truly scientific one, for they are satisfied with nothing that does not appeal to reason.

Churchmen, on the other hand, are notoriously apprehensive of awkward questions. When the B.B.C., for instance, puts ministers of the Church on the air in Brains Trusts, it always ensures the presence, to borrow an Americanism, of a *stooge* or two, to ask the right questions. If, in spite of this, embarrassing questions are fired, a tactful Question Master steers the discussion in paths that are easily trodden.

Lincoln said something to the effect that "You can fool some of the people all the time, and all the people some of the time; but you can't fool all the people all the time."

Because yoga welcomes scepticism, it gains adherents, whereas the churches, despite much free publicity, shrink in power, dwindle in numbers and are sick.

Finally, let me discourage you from studying yoga, for unless you are willing to study and work, question all the time and perhaps suffer disappointment, you will not succeed.

#### CHAPTER II

#### SITTING POSTURES

I AM often asked by those about to take up yoga whether it is necessary to sit in one of the three cross-legged postures while doing yoga breathing and meditation. The answer is, "Necessary for what?" If one wishes to be a yogi, "Yes." If one does not wish to be a yogi, but desires to master advanced Hatha yoga postures (asanas), "Yes." If one wishes to gain the maximum amount of benefit from yoga breathing, "Yes." I strongly advise all who can to master these postures.

But if even the simplest of the three is beyond your powers—and I assume that there are many elderly persons, or even some middle-aged people, so stiff that they cannot sit cross-legged with any degree of comfort—then I maintain that you can still benefit from yoga breathing, yoga postures and other yoga practices without assuming one of the three cross-legged postures.

If you can do them—not necessarily at once—your gain will be much greater. The ordinary cross-legged tailor's pose is comparatively simple. All young people should be able to master it, and so with a little practice, should the middle-aged and the old. But if you have rheumatoid arthritis and are verging on 80, don't put yourself to unnecessary pain. You can still lie in bed, or in your bath, and do yoga breathing, or sit upright in a straight-backed chair.

The idea of this book is to try to help those who are aged and enfeebled, as well as those who are fit, strong and athletic. Young people will be placed on the right path, the pains and aches of the aged can be eased a little. If a single human being is improved in health and made happier by the writing of this volume I shall consider my task well done. My fitness, such as it is, was achieved by trial and error, by wide reading, hard exercise, and at the cost of much time and effort, so I should like to save others the disappointments and setbacks I suffered.

Yoga breathing and meditation can be done either lying or standing. But if you lie down to meditate you are likely to fall asleep. If you stand, a conscious effort must be made to keep in that position, and this disturbs the mind. There is no magic about the sitting positions. They have merely been found to be the best and most convenient by long experience.

Europeans will complain that the cross-legged postures are unnatural. They are, to those who are used to chairs and couches. All over the East there are two *natural* sitting positions: cross-legged on a low cushion or rug, or even on the bare floor; on the haunches, with the feet flat on the floor. Both are unnatural to Europeans and cause pain or discomfort when first attempted, for ligaments and tendons not used to such treatment are stretched.

In the East one rarely sees people lolling. Walk along any busy street in India and you will see banias (shop-keepers) with their legs crossed so that the soles of their feet are upturned, with their enormous stomachs resting on them, for all the world like marble Buddhas come to life. They've sat like that since childhood and their limbs have grown accustomed to the position. They do it without effort, and that posture tends automatically to hold the spine naturally erect. I use the word naturally because the

spine was never meant to be perpendicular, like a ramrod, as most sergeant-majors would have it. Study the chart of a human body and you will notice that the spine is naturally curved. Only when the curves are in the wrong places do our troubles begin.

The cross-legged position, then, helps this natural tendency.

If at first you feel that even the Easy Posture is impossible, don't give up. Try it for a few seconds each day, and in a few months it will become second nature. If you are thirty or forty years of age, your muscles may have stiffened and must not be torn or strained. Let your motto be the Chinese one: "Slow, slow, catchee monkey."

Man's second natural position of rest is the squat with the feet flat on the ground and the weight taken on the haunches and knees. If you've never sat in that position, try it for two or three minutes (if possible) and you'll find the experience agonizing. It is a most restful position; I've watched villagers sitting on their haunches all evening, singing and gossiping. This position helps to strengthen the iliac and lumbar regions, for each time you rise from the haunches into a sitting position the stomach muscles are brought into play.

It is also the natural position of evacuation, and the moment Man discarded it he invited trouble in the form of constipation. Scores of authorities, among them Bernarr McFadden, Dr. Kathleen Vaughan, F. A. Hornibrook, Sir Arbuthnot Lane, Dr. Leonard Williams and Dr. Reginald Austin, have stressed this point. Hornibrook's book on the abdomen is worth reading, if only for this. A friend of mine goes even farther. While at Cambridge he wrote a thesis showing that the modern lavatory seat is the cause of most stomach and nervous disorders, and the decline of civilization! I would not go as far as that.

The Greeks must have rested a good deal on their haunches, for if you glance at the statue of almost any of their athletes you will find that the muscles in the iliac region are unlike those of European athletes, but closely resemble the development of Indian, Japanese and Chinese wtestlers.

Correct posture is even more important to women, who have to bear children, than it is to men. In Havelock Charles' paper, Scientific Memoirs of the Army in India, he states that owing to the European habit of sitting on chairs, the lumbar curve becomes more pronounced, and the vertebræ becomes deeper in front, whereas the Eastern habit of sitting on the ground, which is a natural posture, helps to abolish the lumbar curve. It is the sitting position adopted by a woman over a number of years that helps to determine the size and shape of the pelvic brim, and, very often, the physique of the child.

Both Dr. Kathleen Vaughan and Dr. Grantley Reid Dick, who have shepherded thousands of mothers through painless childbirth, insist that correct posture has a great deal to do with it.

All this doesn't mean hat you've got to sit on your haunches for hours.

Whatever you do, don't make you relf into a crank, or into a figure of ridicule.

There are four recognized meditative poses, but two will suffice for those who read this book. One is the Easy Pose, which is illustrated in Plate 1. Sit, as illustrated, with crossed legs, on a thick carpet or low cushion. At first your knees will stick up into the air, so practice daily and press them down gently till in time the hip joints become more flexible. If you are stiff or elderly, this may take weeks, or even months. In the illustration the knees are well off the floor.

A more advanced pose is Siddhasana, or the Perfect

Position Sit down and stretch your legs out in front. Bend the left leg at the knee and place the heel under the perineum. Then fold the right leg across till the heel touches the pubic bone. Place the hands on the knees, palms outwards, the first three fingers stretched out easily, the first finger bent so that it lies under the thumb. Plate 2 illustrates this posture.

Siddhavana is difficult. It so strains the tendons and ligaments that many who attempt it the first time cry out, "Impossible!" Don't be discouraged. Practise daily for a few seconds till your joints grow more supple and your limbs learn the new positions

Each time you fail, or rise to your feet with groans, remember that nothing worth doing is easy. The Lotus Seat, or Padmasana, is much more difficult, for the feet, with upturned soles, are placed on opposite thighs, but this is a book for beginners, and there is no need to describe that Siddhasana (Siddha means "adept" in Sinskrit) will suffice for your needs. Incidentally, fully fledged vogis can continue in the I otus Position for three hours without the least sign of strain, but they devote their lives to yoga and have unlimited time, whereas you've got to be at the office or the factory, and when you go home your wife expects you to visit friends or have them in. Your aims are limited better health, a mind free from worry, and peace

But once you've mastered the Perfect Posture, it is a restful position, balancing your body on a fixed base, you will need no conscious effort to sit naturally erect. Breathing done in this position helps to strengthen the nerves and clear the mind. There are many extravagant claims made about yoga postures, but they should be accepted with reserve. The postures alone will not achieve miracles. They are only part of the entire system of yoga philosophy.

There are, however, some exceedingly advanced asanas

#### CHAPTER III

#### RELAXATION AND THE DEATH POSE

THE best time for doing yoga breathing and asanas or postures is either early in the morning after washing or bathing, or before retiring. For most readers the second period is convenient, for then the work and worries of the day are behind one, and after yoga practice one tumbles into bed relaxed and pleasantly weary, and sleep should follow almost instantly.

Before doing breathing or asanas it is advisable to relax for a few minutes. This will help in your breathing and get you into the right mental condition for the exercises that follow. Also, unless relaxed, sleep will not come easily.

There are two parts to relaxation: mental and physical. When both are attained there follows a feeling of spiritual well being. But wither mental peace complete physical rest is impossible. You can practise physical relaxation at various times throughout the day: in the morning, during the lunch hour, and in the evening before you emerge for a few hours' enjoyment. Make relaxation a habit to rid you of physical strain.

Today many factories, business buildings and offices are planned with spacious lawns round them. On these, in summer, employees eat their lunch-time sandwiches and sunbathe.

Always, even if on heavy work, at a comparatively light lunch, and if possible spend five minutes in physical relaxation on the grass outside, in doing the simplest of all yoga exercises, the Death Pose, or Savasana.

This is done by lying flat on your back with your legs straight out and your arms extended naturally along the sides of your body. Sava is the Sanskrit for "dead body," so when doing this pose you should resemble a corpse.

Relinquish all idea of effort. Let your entire body sag and go limp. Don't let even breathing be a conscious effort, and you will find that you are breathing from your stomach rather than your chest, which is, of course, the way you breathe when asleep.

Are you utterly relaxed? Go over each part of your body. Are your eyes closed; has your lower jaw fallen; are any muscles in your arms, chest or stomach tense? And what about thighs and calves—are they limp? And your ankles—are they engaged in holding your feet upright or not?

It will soon be apparent that not every part is relaxed and you will have to make a complete check two or three times to achieve the desired result. Are you listening to anything, or is your mind also at rest? Or is it still wrestling with some problem that should have been left at the office?

Relax utterly for five minutes—which will seem much longer—then grasp hold of your mind and drag yourself back to reality. You will find that five minutes of absolute relaxation will make you feel much fresher and abler to carry on the afternoon's work.

Relaxing in this way brings on sleep quickly if the mind is at rest, too. Both Lloyd George and Winston Churchill were in the habit of having a cat-nap after lunch, and so, despite the enormous pressure of work they were subjected to in the first and second world wars, retained a vitality that staggered all who came into contact with them, and despite their age worked much harder and retained a much firmer grasp on national affairs than much younger men. Each has publicly attributed this vitality to the fact that he relaxed completely at midday. Mr. Churchill goes to bed

for an hour or two after lunch. Lloyd George went even farther. If he felt in the least bit off colour he went straight to bed and stayed there for two days, no matter how urgently he was needed in Whitehall.

Most people do not understand the need for physical, mental and spiritual relaxation. The older we grow, the faster life becomes. I am not among those who rail against speed. Speed links the farthest corners of the world more closely than ever. What I detest is the rate at which we live. Everyone who saw Charlie Chaplin's film *Modern Times* agreed that the speed at which life is now being lived is destructive But how many of us *try* to do anything about it?

Too many people are intent on doing something all the time. If they retire with a book or sit down to think they imagine they are missing something. When Maxim Gorky visited America enthusiastic friends took him to Coney Island to see the wonders there. He was shown one dizzy contraption after another; switchbacks that tossed one into the air, dippers that took away one's breath, swings that made one sick; jugglers, dancers, living statuary and sideshows filled with freaks; everything to distract and prevent thought. "You can never be lonely for one second on Coney Island," boasted one proud citizen.

At the end of what seemed like a session in a madhouse his captors asked, as they led the dead Gorky home, "Say, Mr. Gorky, what d'you think of the American nation?"

Gorky considered for a moment. "What a sad people you must be."

That man was made for speed and not speed for man is symptomatic of the present age. Not long ago a Miss Frances Dyckman of New York can to Britain to arrange two-day trips for such of her countrymen who wished to see all England from the London Zoo to Ann Hathaway's cottage. But after a little preliminary skirmishing even she

was forced to admit that four days were not enough in which to take in England thoroughly. Someone should have told her that it takes at least a week.

The craze for rushing through life, seeing as much as one can, doing as much as time and the human frame will allow—but none of these things properly—is one of the curses of our time, and the cause of much of the neurasthenia now rampant. Neither experience nor satisfaction is gained necessarily by charging from one place to another like a mad bull, or spending money.

A friend of my wife's who came over one evening tried to impress us by a description of the wonderful time she had. "Do you know." she chirped, "I never spend an evening at home. It would simply kill me! I'm always out, doing something." Her idea of a good time appalled me. Her home must be like a railway station; friends stroll in for a few minutes to drink cocktails and then go shooting out again.

She never has time to read a book, to sit and think, to talk with friends, to ponder over the state of the world, or just to poke the fire and watch the pockets of gas spurt from the coal and burst into many-coloured flame.

In order to savour life properly you must think about it in order to think you must occasionally have solitude.

Solitude and loneliness are different things. You can be lonely in a crowd; but in the solitude of your own room the images of friends crowd round you.

How many live as full a life as Henry David Thoreau, who built a little wooden hut on the shore of Walden Pond, dug his garden, grew his corn and lived the life simple. The quiet enabled him to put down his ideas in his little book, Walden: My Life In The Woods, which is now a classic. Mahatma Gandhi says that Thoreau did more than anyone in the world to influence his thoughts and actions.

Little did Thoreau imagine when he put his thoughts on

paper that in less than a century they would so influence a stranger in a foreign country to exert such power that by following his example his people would peacefully dismiss from their shores a powerful foreign invader.

Such is the frightening power of clear thought. It achieves more than armies and atom bombs. Samuel Butler pondered idly for years before he wrote *Erewhon*, which made men realize that there is much sense in his idea that criminals are really sick people who should be treated in hospitals and that the sick should be locked up until they are well. The National Health Service and the social services, and our new attitude towards criminals; these are the result of the foundation that Samuel Butler and men like him laid down.

People who rush about in a frenzy don't always get the best results. The ancient Chinese believed in the theory of "masterly inactivity," which served to lay the foundations of a wonderful civilization.

Work slowly and methodically, with periods of rest.

In 1943 when the British and American armies were plodding over the rough terrain of Italy a high American officer was puzzled by our behaviour. "You Britishers are a queer lot. You're always stopping for tea; yet at the end of the day you've made more ground than we have."

Let there be time to "stop for tea" in your life. A break just when things are moving fast an furiously is an excellent habit. It removes tension. It gives just that amount of breathing time to enable you to carry on with renewed efficiency. A small nation like the English could never have achieved so much without this philosophy of knocking off when things get most exciting. At a critical point in his career Drake broke off for a game, bowls. When the Fifth Army was attacked in 1918 its commander, General Sir Hubert Gough, having made his plans, went to sleep and gave orders that he was not to be awakened till a certain

hour. When Admiral Sturdee was chasing the Germans at the Battle of the Falkland Islands he felt that such a moment was just right for a shave. Montgomery laid his plans for Alamein, then retired to his caravan during the opening stages of the battle.

Even the game of cricket has something of the sane yoga philosophy about it. Just when events are at their most exciting, the umpires whip off the bails, and no matter what the state of the game, everyone goes in for tea. How sensible; how civilized.

The yogis realized centuries ago that the mind always functions better in a state of relaxation. Force ideas into your brain and the result is utter weariness. Ruminate, and ideas leap into it. Descartes usually lay in bed till eleven, thinking. His best ideas came to him then. Archimedes lay idling in his bath twenty-two centuries ago when he discovered the truth about displacement, and leaping up ran naked through the streets of Syracuse shouting "Fureka! Eureka!" (I have found it!) Newton was sitting in his garden at Woolthorpe, thinking, when he saw the apple fall and came to his momentous conclusion about gravitation; and Galileo was relaxing in the calin of Pisa Cathedral when he observed the rhythmic swing of the chandelier which gave him the clue to the principle of the pendulum

You cannot squash a quart into a pint pot, so don't try Life is far more satisfying if you achieve satisfactorily a limited amount.

Even holidays, which are meant to refresh one, a. a curse. Everyone has them at the same time, and seaside resembles Woolworth's on a Saturday afternoon. One has to queue for meals and entertainment, and thousands return from holidays so fagged that they need a fortnight in a rest home to recover. Rest and relaxation are the last things that most people think of while on holiday.

You can pay others to do many things for you, but you alone can relax. A millionaire once made an appointment with Dr. David H. Fink, the psychiatrist. "There's nothing wrong with me," he explained, "my doctor says I'm organically sound. But I can't sleep. My appetite's gone, and I don't get any fun out of life." After a pause he added, "I've read all the books on the subject—but I'm a busy man. I can't just drop a ten-million-dollar business for all those exercises!"

All his life he had pressed buttons and cringing helots had leapt to do his bidding. Now the system had failed. Despite his money he couldn't relax Or, perhaps, because of it.

About a third of the sick people in Britain suffer from neurasthenia, and though they can lie down and rest their limbs, they cannot relax their minds. Thoughts keep chasing through their heads and they rise more tired than when they went to bed. Their sleep is disturbed by troublesome dreams and they are on edge all the time.

Inability to rest body as well as mind is one reason why men and women grow haggard and prematurely old; why they die ten, twenty and en in thirty years before their time.

In olden times life moved at a much slower pace. There were clearly prescribed days for work as well as leisure. One day each week was set aside for prayer, meditation and worship. Whether one agrees with worship or not, all must rethat enforced periods of rest and meditation are essary for recuperation.

lay there is so much to distract and entertain us that we are constantly afraid of missing something, and spend much of our waking lives trying to catch up with pleasures we feel we have missed.

Relaxation does not mean doing nothing. Don't confuse it with inertia. The word "relax" comes from laxare,

"to loosen, to become slack." In his book, *Harmonic Gymnastics*, Stebbins defines relaxation as a "conscious transfer of energy from one department of nature to another, with perfect ease and grace, after an extreme tension of body and brain." Relaxation is often merely a change of occupation.

Centuries ago the yogis realized the value of the ability to relax at will, and after numerous experiments incorporated into their system exercises and observances and thought training, which if carried out enable the student to obtain that peace of mind "that passeth all understanding," and with it, complete bodily rest.

I have seen hillmen in the Himalayas, after trudging for many miles with heavy packs on their backs, throw down their loads and fall by the wayside, as if unconscious. After a short period of utter rest and a drink of cool, clear spring water, they hump their burdens and make off, refreshed. That kind of relaxation, or "resting at will," is rare in civilized countries. Men seem to have lost the instinctive power to rest; a power which savages and animals still enjoy.

If you can relax you can double your efficiency; for when weary, a short period of complete relaxation will rejuvenate and fit you for further labour.

The Death Pose is but one way of relaxing. Control of breathing is another, and so are yoga exercises. Yoga breathing calms the mind and helps to control one's thoughts; and when thoughts come under control, relaxation, if not automatic, is at least much easier.

A further bar to relaxation is the wrong mental attitude. You cannot relax completely if you have done an injury to another, and not repaired it completely. If you injure a man, you will automatically bear him a grudge; if you cheat him, you will bear resentment.

Try to be fair in your dealings with others; go rather to the other extreme and give more than you receive. Treat others as you would wish them to treat you, or to quote the New Testament, "Do unto others as you would they should do unto you."

This is not merely sound yoga philosophy, Christianity, Buddhism or Confucianism. It is common sense. And common sense lies at the root of all yoga teaching.

Another bar to peace of mind and, as a result, to complete relaxation, is a hypercritical attitude. The critical faculty is an important one; but our lives are so hedged about with rules and taboos that we tend to become unduly critical, and there is a tendency among strong characters to measure their weaker brethren by the yardstick of their own personality. And when the weaker ones fall short of this high standard they are subjected to unmerciful criticism, though perhaps not openly. But even if you are hypercritical only in your mind, it is difficult to relax. It is better by far to speak out and be done with it.

Criticism nags into your brain and prevents peace of mind.

The Bible warns us against this trait. "And why beholdest thou the mote that is in thy brother's eye, but beholdest not the beam that is in thine own eye?" (Matt. vii. 3).

This attitude is often adopted by people of scholastic attainments towards their unlettered brethren. They are filled with the arrogance of learning, and sneer at those who have not had the same opportunities.

The snobbery of culture and learning is one of the worst forms of snobbery, and is rarely to be found in those who have climbed to the very heights of their profession, or to men who were born to the purple. Its roots are to be found in a sense of inferiority.

Such people should learn and remember the lines written by Bhai Vir Singh, the Sikh poet:

I made my mind a beggar's bowl. I begged the bread of learning from door to door. Filled it with crumbs from houses of learning. Crammed it full. It was heavy. I was proud—a man of learning. I strove to walk in the clouds But stumbled on the earth. Then I sought the Guru. Placed my bowl before him—an offering. 'Dirt." he cried. Dirt.' Turned it upside down. Threw the crumbs away. Scrubbed it with sand. Rinsed it with water. Cleansed it of the filth of learning.

If you are filled with a sense of sneering superiority, you cannot relax.

Patanjali lays it down in the Sutras that one must bear with the weak and have tolerance for those who fail to come up to the standards we set ourselves.

There is nothing more painful than a self-righteous person; one whose vision is so blinded that he cannot see his own faults, yet is constantly pointing out the short-comings in others. He reminds one of King Gama, in Gilbert and Sullivan's *Princess Ida*, who says:

If you give me your attention, I will tell you what I am! I'm a genuine philanthropist—all other kinds are sham. Each little fault of temper and each social defect. In my erring fellow creatures I endeavour to correct. To all their little weaknesses, I open people's eyes. And little plans to snub the self-sufficient I devise... To compliments inflated I've a withering reply, And vanity I always do my best to mortify; A charitable action I can skilfully dissect; And interested motives I'm delighted to detect; I know everybody's income and what everybody earns;

And I carefully compare it with the income tax returns . . . I'm sure I'm no ascetic; I'm as pleasant as can be; You'll always find me ready with a crushing repartee, I've an irritating chuckle, I've a celebrated sneer, I've an entertaining snigger, I've a fascinating leer. To everybody's prejudice I know a thing or two; I can tell a woman's age in half a minute—and I do. But although I try to make myself as pleasant as I can, Yet everybody says I'm such a disagreeable man!

And I can't think why!

Nor can naggers relax. Women are more prone to nag because their lives are more restricted than the lives of men They exist in a smaller circle and in every way are more constricted; thus they set a greater importance on little things which men regard as of little consequence. If the positions were changed, men would be the naggers, for it is not a fault inherent in woman alone.

Don't look for faults in others, else you can never hope to relax completely. If you don't like the way a person lives or acts, remember that it is his way, and you are not bound to subscribe to it. Cut adrift and live your own life.

If you don't, you may do all the yoga asanas and breathe yourself blue in the face, but fail to achieve relaxation. Relaxation is first a state of mind; then a state of the body, and finally a condition of the spirit.

Remember that perfection is something one strives after, but cannot hope to achieve on this planet. But we can bubble over with tolerance. It is not a sign of weakness but of strength. Take a tolerant view of those who offend you, of those who do not come up to your standards, and you will be astonished how human and friendly and willing they are. Your attitude to them will also change, and you will no longer feel like a wound-up spring.

#### CHAPTER IV

#### YOGA BREATHING

Yoga breathing differs from all Western systems of breathing. Their aim seems to be mainly to charge the blood with oxygen, and to increase the capacity of the lungs and rib box. Those who specialize in breathing exercises boast that they can increase chest measurement by two, three or more inches in a matter of weeks. Before the war advertisements used to appear informing the simple that their chests could be expanded so much that they would have no trouble whatsoever in passing a medical examination to enter the Army. But now that the forces accept almost anyone who has a pulse beat, these advertisements are no longer seen.

The purpose of yoga breathing is quite different. Its aim is to help one to attain samadhi or release of the spirit, and to this end one must observe the yamas (restraints) and niyamas (observances); and practise asanas and pranayama.

Let me stress once again that it is no use doing only that part of Hatha yoga that appeals to you. The system is a balanced one and you must study and practise every part of it. The mental and spiritual sides are as important as the physical. It is no use being dishonest, untruthful and corrupt and then to imagine that you can gain the maximum benefit from exercises and breathing. You will, of course, gain some physical benefit; but even this will be limited. The restraints and observances help to develop your personality. The breathing exercises should become so much a part

of your life that they should not intrude unduly on your consciousness when you are practising them.

That is one reason why yoga cannot be mastered in seven days, seven months or even seven years. It grows on you and becomes a habit of a lifetime. Your development should be gradual so that you will not be conscious of any great change from month to month, though if you look back after five years, or even one year, the difference physically, mentally and spiritually should be apparent.

That is why you should also practise the asanas until they are no longer exercises, but habits.

The idea, then, of yoga breathing is not to give you a bigger chest or lung capacity—though it will, of course—but to charge your blood with oxygen and help you to keep fit. In addition, the aim is to bring under control the prana, or, as some call it, akasha—life force. electricity, term it what you will—that exists in the atmosphere; the source of energy, or the nervous impulses that make the body tick.

Yoga breathing or pranayama gives one control over the vagus nerve. Dr. Bernard Aschner writes, "The heart specialist pays special attention to the diaphragm. This is a very important item, for when this organ of respiration, which is shaped like a stingshot, is displaced too far upwards, it may press against and restrict the heart.... It marks a great step forward that modern medicine has rediscovered the relationship between the heart and stomach, which has as its intermediary the vagus nerve, common to both organs."

Aschner 'uses the word " rediscovered." He is right; for the yogis knew what were the functions of the vagus nerve.

How they knew I cannot say, but they evolved a breathing system to control it. The vagus has two sets of fibres; those that convey impulses inwards and others that convey them outwards. The first induces inspiration and stops expiration; and when the second is stimulated the opposite process takes place. These fibres are brought into operation and stimulated by the expansion and contraction of the air vesicles of the lungs, at the end of the vagus nerve.

Ordinarily, one has little or no control over either breathing or the nerves. Suppose you are badly frightened; what happens? The emotion of fear grips you in the intestines. The solar plexus or "abdominal brain," which is the centre of the nervous system, contracts, and there is a rapid change in respiration, circulation and metabolism. The colour of your skin changes because the blood is drained from it; you breathe faster as the adrenal glands discharge their secretions into your blood, and you are ready to make a much bigger physical effort than normal, if needed.

This cycle concerns fear only. When other emotions are induced, the reactions will differ. The sight of a large dog snarling and baring its teeth an inch from your calf may have this effect because dogs are more sensitive than you are, and the aura of fear produced by your state of mind may cause the animal to sink its fangs into your leg. This aura of fear and the reaction it causes in the lower animals is one reason why they attack human beings and animals smaller than themselves. Without this fear Man could—and sometimes does—walk unarmed among wild animals, and remain immune from attack.

The yogis claim that by regulating the breath one can prolong life almost indefinitely, or at any rate, well beyond the normal span, and at the same time enjoy perfect health. It is not much use living to be a hundred if at that age you can merely totter about, are completely gaga have to be fed, and dribble when you speak. That is mere existence, not living.

Yoga breathing not only charges the blood with oxygen but absorbs life-giving force from the air and transfers it

into the nervous system. In order to get more of this force you must breathe more of it into the body. Deep breathing, which is the basis of Western systems, is of little value, for there is a limit to the volume of air one can suck in at any one breath.

There are three kinds of breathing practised in the West. In the first the air is sucked into the upper section of the lungs; that situated nearest the collar bone. When a deep breath is taken the subject looks like a pouter pigeon, goes red in the face, and the minimum amount of air is inhaled. The second type is known as theracic or intercostal breathing, because the air is taken into the middle section; but more is inhaled than in the first case. The third kind is known as abdominal or diaphragmatic breathing, which has become fashionable in Europe and America in the last fifteen years. In this the diaphragm presses against the abdomen and pushes it out like a small football, and the air is sucked into the lower section of the lungs.

The first yoga practice is to inhale so as to fill the lower portion of the lungs; then to swell out the rib box with air; and finally to force air into the upper section of the lungs—and to do all this in one long, rhythmic breath.

First do it in stages. Then, after practice has made you efficient, combine all three operations in one smooth inhalation. By reversing the process, breath may be forced from the uttermost parts of the lungs.

Practice till you do this easily.

The best position to adopt when breathing is either padmasana or siddhasana, though if you cannot manage these, the comfortable, cross-legged position will do. If even this is irksome, sit upright on a straight-backed chair, with the feet firmly on the floor, and your hands on your knees. Always sit rather than stand when you do yoga breathing. This rule is not inflexible, for yoga breathing

can be done sitting, standing or lying, though without achieving the same results.

Don't contort yourself into a painful posture that cannot be held without an effort, for that means that you will have to concentrate more on your position than on breathing. The idea is to n'aster the posture so that it becomes second nature and you don't have to think about it.

Now begin the complete breath; not in three jerks, but in one smooth, synchronized effort. Breathe in slowly, filling the lowest portion of the lungs. Suck the air into your stomach, and let the rib box expand. Finally, fill the upper portion with air.

Hold your breath for a few seconds; then exhale in the reverse order; upper, middle and lower, and use the muscles of your stomach to squeeze out the last vestiges of air.

Hold your breath and inhale once again.

Unlike Western systems of breathing, which consist merely of inhaling and exhaling, some yoga breathing exercises are done in three stages: puraka (inhalation), kumbhaka (pause or holding of breath), and rechaku (exhalation).

There are some exercises in which there is no kumbhaka. One is kapalabhati. Sit erect on a cushion or soft pad in the cross-legged position if possible, the hands resting on the knees. Breathing should be rhythmical and fast; a full, smooth inhalation, then out vigorously, calling into play the abdominal muscles and diaphragm to drive out every cubic centimetre of air. As you become expert your stomach muscles and diaphragm will grow stronger and more elastic and will give a powerful drive to the exhaling "kick." Normally when breathing, such effort as there is, is made during inhalation, and exhalation is passive. In this exercise inhaling is smooth and easy, whereas the full

force of muscular drive is made during the exhaling period. Exhalation should be sudden and take about a fifth of the time of inhalation.

At first, do this about ten times, inhaling and exhaling counting as one round. Rest for a few seconds. Do another round of ten. Rest again and conclude with a third round of ten.

During the following week increase the number of repetitions for each round to twenty, then thirty, and, in the fourth week, to forty. Keep on increasing gradually—not necessarily by ten each week—till you are doing 120 repetitions without a pause. You need go no farther than this, for as you grow more skilled you will be breathing at the rate of about three complete rounds each second.

Never force the exercise so that there is at any time a strain on your body. If you have a weak heart or suffer from palpitation, do this exercise gently. Should you feel any adverse effect, STOP. But if you are in normal condition there is no danger whatever of strain.

The regular practice of kapalahhati helps to keep away colds, improves digestion, assists the cure of constipation, and because it does all this, helps considerably to keep senility at bay. But there is no use doing kapalahhati on its own to the exclusion of other yoga breathing, otherwise its effect will be minimized. Yoga excreises and breathing are complementary.

Incidentally, you will never become thoroughly adept at kapalabhati until you can hold the Lotus Position easily, for if you breathe in and out very fast and vigorously you are likely to lose your balance, and only when your feet are locked and your body properly but need will you remain secure. Nevertheless, much benefit can be obtained by sitting in the Easy Pose; in a straight-backed chair, or even lying down in a bed or bath

F. A. Hornibrook seems to have based his "pumping" exercise on the principle of *kapalubhati*, though he may not have been aware of yoga methods, for he tells his readers not to use pumping as a breathing exercise, but purely for its muscular effect. The muscular effort required at the end of each exhalation of "pumping" is, however, similar to that exerted by the *rectus abdominus* and the *intercostal* muscles in *kapalabhati*.

Anyone who has experience of Western systems of physical culture will find that some are based on yoga; a few have just been lifted without any alteration. And why not, for they are excellent.

In performing kapalabhati the mind should be concentrated on the abdominal region, for this is where the greatest effort is concentrated, and it is by the practice of this exercise and others that kundalini is awakened at the navel. One of the aims of advanced yoga is to awaken kundalini, though in this volume 1 shall limit myself to advice that will enable you to attain better health only, for the power of kundalini can be generated only under the guidance of an expert, otherwise harm may be done to the nervous system. And I have never claimed to be an expert.

Next come the four bhedas: suryabheda, ujjayi, sıtali, and bhastrika. For suryabheda, sit in the same posture, but tuck your chin into the hollow of your neck, above the Adam's apple. Place your left palm in front of you and fold the first and second fingers on to the palm. This will leave the thumb and third and little finger free. Press the thumb gently against the side of the left nostril, blocking it, and inhale through the right nostril. Then hold your breath. Now shift your hand slightly to the left, releasing the left nostril; but the right nostril will be blocked by the third and little finger. Exhale through the left nostril.

Repeat. Block the left nostril, inhale through the right,

hold your breath. Block the right nostril, releasing the left, and exhale through the left. Between *unhalations* hold your breath as long as possible without strain. As you continue, you will find that you can hold your breath longer and longer without strain.

Inhale and exhale slowly and smoothly.

Repeat this exercise ten times and increase by about two repetitions a week, till twenty have been reached. When exhaling, concentrate on the abdominal muscles.

Done properly, this exercise does more towards the prevention of tuberculosis than any; it induces perspiration and raises bodily temperature. But suryabheda will fail in its purpose if done to the exclusion of other yoga exercises.

When practising any system there are some exercises one likes better than others, and there is a tendency to skip or scamp these. Of yoga breathing exercises I prefer kapalabhati and bhastrika and have to take care that I do not hurry through the others.

In *ujjayi* the breath is taken in deeply and slowly through both nostrils, with the glottis half closed so that a choking or sobbing sound can be heard. When the lungs are filled hold your breath as long as you can without strain; then swallow, and exhale through the mouth. The chief value of this exercise lies in the period of kumbhaka, during which the breath is held. Kumbhaka nould be twice the time taken to inhale.

Yogis have a theory that air taken into the body flows along the *nadis*, or channels from the throat to the navel, and in *ujjayi* this breath-force is sent surging along the *nadis* when the subject swallows at the end of each *kumbhaka*. There is no scientific comboration of this, but because by means of these practices they have achieved a state of body, mind and spirit beyond the power of any orthodox scientist, we must respect if not accept the theory.

Let each round of *ujjayi* occupy about fifteen seconds, and to begin with do no more than four or five rounds. Increase gradually by two each week. Yogis do about 400 or 500, but there just isn't time in the life of a normal man to do so many repetitions, so confine yourself to about ten a day. *Ujjayi*, too, has the effect of raising bodily heat.

Both sitkari and sitali have the opposite effect; but they must be performed to obtain a balance. In sitkari the teeth are kept together so that they just touch, the tongue suspended in the middle of the mouth, and air is sucked between the teeth in such a way that the force of suction brings into play the muscles of the stomach. Exhale through the mouth.

Breathe in and out forcibly and rhythmically fifty or sixty times with a hissing effect. The exercise should take less than a minute and is best practised at night, for it helps to cure insomnia, and when one is fasting, keeps at bay the pangs of hunger and thirst. Claims have also been made that it induces poetic genius, but this should be taken, as the lawyers say, "Cum grano salis" (with a grain of salt).

In sitali the order is reversed. You breathe in through the mouth and out through the nostrils, and this, too, it is claimed, has a cooling effect upon the body. Both sitkari and sitali are contrary to all the teachings of Western physical culture experts, in which the breath is always taken in through the nostrils. In sitali teeth and tongue are held in the same position as sitkari while the air is inhaled; but the lips are closed for exhaling.

Now for bhas.rika. Adopt the same seated posture as in suryabheda. Place the thumb gently against the fleshy part of the left nostril, leaving the right nostril free. Inhale deeply through the right nostril so that you feel the air fill the lower portion of the lungs. Then place the third and

little finger against the fleshy part of the right nostril and release the thumb. Exhale through the left nostril.

Now inhale deeply through the left nostril, close it with the thumb, release the right nostril and exhale through it. Then inhale through the right, close it and exhale through the left. Continue the process: in through the right, out through the left; in through the left, out through the right, and so on.

This exercise does not have the vigorous, muscular effect of *kapalabhati*. It is rapid and rhythmic. Both are among the six cleansing and purifying processes known as the "cleansing of the *nadis*," which rid the body of mucus and other impurities.

Only when you can do all these breathing exercises easily so that they become almost a habit should you think about introducing kumbhaka. This period of pause between inhalation and exhalation must be increased by easy stages. Breathe in for two seconds; hold the breath for two seconds; exhale for two seconds. Increase all periods gradually; breathe in for three counts, hold the breath for four, breathe out in three. Increase progressively the period during which the breath is held, and imagine while holding it that the breath courses through the nadis to the uttermost parts of the body.

Never, under any circumstances, hold your breath longer than you can without effort. Never strain. Bear this in mind, for it is most important.

Gradually, almost imperceptibly, must you increase the period of kumbhaka. Some yogis claim that they can hold their breath for hours, but you may be certain that with the very limited instruction you are getting in this book nothing of the sort is possible. If practised conscientiously, however, these breathing exercises will increase your stamina and energy, and help to free you from colds, coughs and

chills. All may be practised in the bath, with benefit to you.

Some readers will wish to progress much farther than I shall take them. In that case they must master the Lotus Pose and Siddhasana, which are the keys to psychic power. Without them, progress is impossible. Advanced exercises, with kumbhaka, should give the power to raise and lower bodily temperature at will.

If you wish to gain greater control over your body you must devote more time to yoga than a person engaged in working for his living can spare. Many more exercises, with endless repetitions, will have to be done; some extremely advanced and within the reach only of the very fit.

The object of this book is to enable the reader to give himself—I can't do it for him—sound health; or if old and ailing, much improved health; a clearer mind and considerably increased vitality, as well as peace.

Imagination should be strongly exercised while doing all yoga postures and breathing exercises. In this, yoga differs from all systems. Imagination gives Man creative power and lifts him above the lower animals. It will also enable him to create a better body and a better world for that body to exist in. Through lack of imagination Man often destroys the priceless heritage that might be his.

#### CHAPTER V

# YOGA ASANAS

The idea that systematic breathing, or movement of the body and limbs, can drive away illness and make a person strong is comparatively new. It existed in Greece not much earlier than 1000 B.C., for the Olympic register of winners of foot races dates from only 776 B.C. There is comparatively little that we know about ancient Egyptian systems of physical culture, and though there is mention in the Bible of strong men like Goliath and Samson, it is clear that they were not made so by any system of physical culture. Goliath was a giant, thus naturally big and strong; and the story of Samson seems allegorical rather than fact.

The earliest systems were the Chinese, and yoga. No records exist of China as a barbarous state. Great tracts of the country seem to have been civilized as far as history goes back, and ancient records give details of a system of movements calculated to preserve ealth and cure disease which was in vogue about 3500 B.C. In a work on China by Father Amiot, he writes, "Yu Kang Chi, the Second Emperor before Foo Hi. During his reign it was nearly always raining and unhealthy diseases inundated the earth. The Emperor made his subjects perform some military exercises every day. The movemen's they were obliged to perform contributed not less to the cure of those who were weak than to the preservation in health of those who were well."

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This is confirmed by Father Premare, who writes, of the Emperor Yu Kang Chi, "In his time the waters did not flow, the streams did not follow their ordinary courses, and this gave rise to a large number of diseases. The Emperor instituted dances named Ra Vou" (the Grand Turning). These dances were incorporated into the national life and were consecrated in the Lik Ki, or ritual of the civil and religious ceremonies, and one can judge the period of any reign by the dances that were in use during it, which shows how much importance the Chinese attached to the exercise of the body. They danced on every occasion; on the death of Government officials, on the occasion of disasters, at festivals.

The science of this combination of exercise and dancing was known as Cong Fu, and Confucius is said to have perfected himself in the art.

They were also acquainted with massage and all its movements, including friction, pressure, percussion and vibration, and many of their passive movements intelligently applied, like muscle control, produced cures. All these were incorporated into a Treatise of Anatomy attributed to the Emperor Hoang Ti, but in actual fact the originator was one Faa Sse, who formed an official sacerdotal caste about the year 2698 B.C.

Dancing is, of course, the carliest form of bodily culture, though those who practise it do not always recognize it as such. The dances of Africa, combined with music and songs, exhilarate the body and mesmerize the mind. They develop the muscles of the legs and back and strengthen the stomach, endow one with vitality and stamina—all of which were, and sometimes still are, needed by the savage in his fight against the jungle.

The yogis, who observed, experimented, sifted, copied and improved, learnt from those around them, and some

ideas from Africa and China have doubtless been incorporated into their system of asanas, which not only provide movements for the weak and sickly, but for the healthy who desire to continue in that state, for the strong and active, and those who wish to grow stronger and more agile. Yoga exercises on the Wrestler's Pole, for instance, require such strength and agility that they astounded experts from all over the world when they were demonstrated in Stockholm during the Lingiad in 1949. To attain such proficiency one must start young, and work long and hard.

Fitness, health and strength are worth working hard for, if only for the feeling of being intensely alive that they bestow. The normally fit man doesn't fully realize the joy of fitness. Only when one has been ill and weak can one really appreciate abounding health.

Western systems of physical culture—and some are very good indeed—lay stress on movement. "The maintenance of animal life," says Kirkee, "necessitates the continual absorption of oxygen and excretion of carbonic acid... the blood being the medium by which these gases are carried." And in order that this shall take place we resort to movement.

Muscles are made of protein, and contain carbon, nitrogen, hydrogen and oxygen among other substances, and their fuel is a starch called glycogen, which is readily turned into sugar. Without glycogen, movement would be impossible, and when this is exhausted we get more from the blood, which is charged by the food we eat. And as we work and exercise, lactic acid is formed in the muscles causing fatigue, the quantity released corresponding to the amount of work done. The effect of this acid and the fatigue it causes is neutralized by a reserve of alkali in the muscle fibre as well as by inhaling oxygen in the air.

It is on this theory that Western physical culturists work. They try to increase the intake of oxygen so that fatigue may be lessened while working. That is why one is advised to exercise in the fresh air, and games like squash and badminton are played in well-ventilated courts.

The theory is sound and logical; movement for increased blood supply and improved circulation, and fresh air to replenish supplies of oxygen and decrease fatigue.

But the yogis upset all this by an entirely revolutionary theory; though perhaps one should not term it either new or revolutionary as it was thought of many centuries before the systems which depend on violent and rapid movement.

In yoga, acceleration of the blood through movement is minimized; so is the idea of throwing out waste products and purifying the blood by movement.

In the early stages of yoga one has to master poses, and one is considered an adept only when steady poses can be maintained without discomfort. Yogis say that their postures squeeze, exercise and develop internal organs and glands, and they maintain that their system keeps the body supple and agile, increases stamina and the ability to endure extremes of temperature; and helps to keep the correct spinal curvature. Far-reaching claims, but such yogis as I have met were extremely supple and agile, with bodies as tough as leather, though sometimes extremely thin. Thin bodies, if exercised on the right lines, may be as strong and full of vitality as massive, muscular ones.

Even among yogis there are two schools of thought. One, the Nerve School, sets great store on the slim, nervous type of build; the other, the Muscle School, admires massive strength. Each has its devotees. Intellectuals, and those who lean towards things spiritual, favour the first. They may be found in *ashrams* or hermitages. The second type are followers almost exclusively of Hatha yoga, and rarely

practise other forms. And some are extremely hefty and massive.

There are many types in the world and it would not do for all to like or desire the same things.

Now to the exercises or asanas, as they are called. Exercise One is taken from the ancient system of Surya Namaskars. Stand erect on a carpeted floor, heels together and your body neither too stiffly held nor too relaxed. Inhale deeply, raise your arms above your head and bend back as far as possible without overbalancing. Raising the arms and bending back keeps the rib box flexible and strengthens the spine.

Now exhale completely, and while doing so bend forward and place your palms flat on the carpet a few inches in front of your toes. Keep your legs rigid; don't bend the knees. Adopt the pose shown in Plate 3.

While doing this exercise keep your chin pressed tightly against your chest in a chin lock. This, the yogis say, is important, and some medical men who have experimented with the exercise suggest that it has a beneficial effect on the thyroid glands.

Many readers will not be able to place their hands flat on the floor, in which case they should place them a foot or more in front of the feet, and as their backs grow more supple, the distance may be decreased.

A strain may at first be felt in the small of the back, which is the seat of strength, the buttocks and backs of the thighs. This first position relieves pelvic congestion and because of the slight pressure exerted on the abdomen, tends also to relieve constipation.

Observe three points: (1) rigid legs; (2) complete exhalation; (3) chin lock.

Now inhale and step back with the left foot, as in Plate 4. The right knee is bent, but the chin lock must be retained.

Then exhale and move the right leg back, as in Plate 5. Keep the knees rigid and *try* to place your heels on the floor. This is impossible—but try. The effort will stretch the biceps of the calves and thighs. Retain the chin lock.

When this is done, inhale fully, release the chin lock and go down into the dip position shown in Plate 6. The entire body from head to heels must be at about the same level. The head must not be low, or the buttocks humped in the air; nor must the head be raised and the body in an inverted arch. Keep your body rigid. Now exhale.

Finally, inhale deeply and assume the position shown in Plate 7. Arch your back as far as possible, bring your chest well forward, keep your knees rigid, press your head and neck back, and see that your arms do not bend at the elbows. Only your toes and palms should touch the floor.

Then exhale and in one smooth movement resume the position shown in Plate 5. This is not as difficult as it seems. At the same time assume the chin lock, contract the abdomen and keep the legs rigid. The up-swinging motion strengthens the back and loosens the hip joints.

Now inhale and bring the left leg quickly forward, with the right knee rigid. Rigidity is necessary so that the stomach and thigh muscles shall be exercised. This attitude will be the same as in Plate 4, except that the left leg is in the forward position, and bent.

Exhale and bring the right leg up to assume the position in Plate 3. Your hands are flat on the floor, with the legs rigid.

In a final effort try to touch your rigid knees with your forchead.

All these instructions, together with details about inhaling and exhaling, seem complicated; but in fact the whole exercise is extremely simple, and once the order in which the movements must be done is mastered it should be performed easily and smoothly.

Except for the fact that you must be supple enough to place your palms flat on the floor without bending the knees, there is nothing here beyond the scope of a normal person.

This exercise, incidentally, is a complete system in itself, and if done for five minutes each morning and evening will go far to keep you fit. There are many who do no other exercise but this, for it stretches the spine in both directions, and contracts as well as stretches the abdomen; and a man is as strong as his back and as healthy as his stomach.

It is of even greater importance to women than men.

Now for the second asana, which is much the most difficult of the postures I shall describe. Its value, however, is so great that you should keep on trying, and master it, though it takes months. Get a friend to assist you, and you should become proficient in a matter of days, or a week or two at the outside.

It is known as Sirshasana: Sirch being the Sanskrit for "head", and because of the excellent effect it has it is known as the King of Asanas.

Place a folded towel or blanket on the floor as a pad for your head, and then assume the position shown in Plate 8.

Interlock your fingers to act as a support for the back of your head.

Slowly lift the trunk of your body and your legs till they assume the position in Plate 9. Don't delude yourself that this is easy. It isn't. If you can't do it slowly, do it with a rush, but move the furniture so that you won't hurt yourself if you go right over. Or get a friend either to lift your legs or catch you as you topple.

Between you there might be a few laughs in it.

Continue with the raising of your legs till they assume the position in Plate 10.

If you have got to this stage, the rest is dead easy. Merely straighten out your legs as in Plate 11, and remain there for five seconds.

Don't let yourself go limp, or you will fall with a clang. Unwind in easy stages. Bend your knees till you are down to the position in Plate 10, then assume the position in Plate 9, and finally lower your knees gently on to the carpet.

You may ask, "Is it worth all that bother and effort?"

It is. A flow of blood is sent flooding into your brain, and though the feeling might be somewhat unpleasant at first, you will soon get used to it and feel the benefit. Yogis say that this posture has an excellent effect on the pituitary and pineal glands; that it tones the gonads, and benefits dyspeptics and neurasthenics.

Don't practise Sirshasana if you suffer from any disease of the heart, severe palpitations, or from pains in the ears, nose or teeth. If teeth ache when you do this asana, see a dentist at once.

.- Never practise Sirshasana after vigorous exercise; always before. And never immediately after a meal. '\(\times'\)-

Don't be discouraged. Keep on trying, for the initial steps are the most difficult. Once you succeed, the asana will seem easy enough.

If you haven't a friend to help you, try the exercise against a bare wall; but do be careful about hard projections and furniture, for if you fall and hurt yourself it will be much more difficult to make a second start.

Once you can do Sirshasana easily, increase the period in the final position by five or ten seconds each week, but the moment you feel you want to move your legs, descend. Yogis maintain the position without a quiver for three hours, but life is too short for that sort of thing. If ultimately you

can maintain it for ten minutes, you'll not be doing badly. Monotony is the worst feature of this asana; but experts assume the Lotus Pose (in the inverted position) and occasionally swivel their bodies and legs to exercise the waist.

As far as you are concerned, remain satisfied if you can merely maintain the orthodox, straight-legged position.

Exercise Three is one that many Western schools of physical culture have copied, not necessarily from yoga, but from other systems. If you go far enough back, however, you will find that they were originally copied from the yogis.

Exercise Three is *Halasana*, or the Plough Pose, so called because it resembles the shape of an Indian plough. Lie flat on your back with your hands stretched alongside your body, palms down. Raise your legs as in Plate 12.

Gradually tilt them over as in Plate 13.

Place the hands on the small of the back, as in Plate 14, and raise the legs into the vertical position.

Now tilt them over the body, as in Plate 15, till the toes touch the floor.

Then make an effort to shove the toes still farther away from the head as in Plate 16. The chin will press firmly against the chest. You will feel a gradual pull along the vertebral column and a pressure at the cervical point of the spine. This pose stretches the entire back, particularly the small of the back. The entire lumbo-sacral region is pulled and stretched.

Never do these movements fast. Take time and put plenty of effort into the exercise, and remember—the knees must be kept rigid throughout.

This exercise keeps the spine strong and flexible and the nerves that radiate from it healthy. Pressure is also placed on the abdominals, the neck is stretched, and the effect on the thyroid glands is supposed to be beneficial.

Exercise Four. Sit upright on the floor, your legs stretched straight out in front of you, and assume the position shown in Plate 17. It isn't as easy as it looks, and will need an effort if you are in the least bit stiff.

Yoga asanas are so deceptive

Now try to assume the position in Plate 18. The odds are that unless you're extremely supple you'll fail. Don't grow disheartened. Grip your ankles or calves instead of your toes, and bend forward as far as you can. Try to place your forehead on your knees. You will in all probability succeed if you raise your knees—but don't, at first. Pull on your ankles and bend as much as you can. After five seconds return to the upright position, then try again. Repeat five or six times.

This exercise stretches to the utmost the muscles in the region of the posterior and the small of the back. You can feel the tension as you pull. It stetches the spinal cord and the sacral end of the gangliatic cord and tones those important regions, the bladder, rectum, prostate gland and the genital glands. It helps to keep you young. The yogis call it *Paschimottanasana*, but it will be easier to remember it as the Posterior Stretching Pose.

Each time you pull yourself forward, try to remain with your head on your knees, or as near as possible, for five seconds. Repeat five or six times. There is never any need to increase the number of repetitions, for the secret is to get your head down as far as possible, and in order to give yourself encouragement in the early stages, you may cheat by bending your knees.

At first you think it is impossible to improve a great deal, but it is astonishing how quickly the back and thighs respond to constant stretching.

Exercise Five is known as Ardha-Matsyendrasana or the Spine Half-Twist. Ardha means "half" and Matsyendra is

the name of the yogi who originated this posture. Take up the position shown in Plate 19. Next, raise the left leg and place it a little in front of the right knee, at the same time placing the heel of the right leg under the left thigh, also as shown, in Plate 20 the right arm parallel to the left leg. So far, the exercise is extremely simple.

Now twist your face and body to the left as in Plate 21 and tuck your left arm into the bend of the waist as in Plate 21. There will be a tendency for your right arm to swivel to the left, so it is as well in the early stages to place it along the left leg, with the fingers tucked under the foot. This will give stability, and later, when the movement comes easily, this grip can be discarded.

When you have assumed the position in Plate 20, swing into the pose in Plate 21, using the left arm to give momentum to the movement. This accomplished, lock the fingers of the left hand in the crook of the waist as in Plate 22 and retain the posture for five seconds. Then release yourself from this position and do the entire movement in the opposite direction; that is, by placing the right leg out, tucking the left heel under the right thigh, twisting right and tucking the right hand round the back and into the crook of the left side of the waist.

Do the exercise alternately, first to the left, then to the right, five times in each direction. It is not the number of repetitions that matters, but the amount of force you put into the twist, so that when you are adept at it you need do it only once in each direction to get the maximum benefit.

The idea is to keep the spine stretched and elastic and to squeeze gently the abdominal organs. It exercises the nerve roots and quickens the blood surply. This exercise is so simple and easily done that even the stiff and aged can get a good deal of benefit from Ardha-Matsyendrasana, the name being more formidable than the movement. The

effect is much the same as the "Bent Press" in weight-lifting.

In writing this book I have borne in mind the fact that few readers can spare more than fifteen to twenty minutes a day for yoga. When you begin you may in the first rush of enthusiasm spend an hour or more trying out the breathing exercises and movements, but the novelty will wear off and there will be other calls on your time, so I have outlined only a few carefully chosen postures which, once mastered, may be practised thoroughly in a few minutes.

In addition to the usual way, yoga breathing may be practised in a warm bath—or in summer in a cold one.

In winter I work till about eleven each morning, then lie in a hot bath with a book. A very bad habit, I am sure, but one which I make no attempt to curb. After soaking for ten minutes I put my book down, let out the hot water, put in the plug, and turn the cold tap full on. As it fills I lie in the bath doing either *kapalabhati* or *bhastrika* from 150-300 times. Only when the bath is about to overflow do I turn the tap off with my toes, sit up, pull out the plug and dry myself.

If you wish to do likewise, first inure yourself all summer by bathing in cold water, and then you will enjoy a cold bath after a hot. BUT DON'T TRY IT IF YOU HAVE A WEAK HEART, for people with weak hearts should not risk baths that are either too hot or too cold.

There are some eighty-four postures in the complete table of yoga exercises; some so difficult that only the fittest and strongest can do them.

The Mudras, Bundhas, the Locust and the Fish Pose come into this category, but it would be merely a waste of time to describe them. One is the See-Saw, Mayurasana (Peacock Pose), illustrated in Plate 23, which requires great strength in arms, back and legs. Western systems of

physical culture have borrowed and called it the *Planche*, and only advanced athletes can do it. Try it. It looks easy, but unless you are strong you won't succeed.

I will, however, describe the first stage of *Uddiyana* Bandha because it is an excellent exercise for the prevention of constipation.

Stand with your feet about 12-18 inches apart. Force every cubic inch of air from your lungs. To do this you will have to bend forward slightly.

Now place your palms on your thighs, press downwards gently and raise your chest. There is no air inside your lungs, so as you raise your chest and stand upright, the walls of your stomach will tend to collapse, and when done properly there will be a cavity under the rib box into which you can stuff both fists.

Relax and inhale. Rest for a few seconds, then exhale and try again.

The chances are that you will fail to achieve the desired result for days, weeks, or even months; but when you do, your stomach muscles will be far more elastic, and so able to function normally. Then you can pass to the next stage, and from there to Nauli Madhyama or, as the Western systems call it, Isolation of the Rectus Abdominus muscles.

Western systems regard this as muscle control. It is much more. Nauli Madhyama 's merely the step before Nauli Vama and Nauli Dakshina. These lead to Bhasti or internal cleansing, the Mudras, and the path to the release of Kundalini.

All except *Uddiyana Bandha* are difficult to explain without a personal guide. Even illustrations leave a good deal unexplained. But, because it leads to the prevention and cure of constipation, *Uddiyana Bandha* is worth mastering. But it is almost impossible if you have a paunch. So get rid of that first.

# CHAPTER VI

# THE GLANDS

I AM touching on the subject of glands because the yogis claim that their postures, *mudras*, breathing exercises and method of thought control all have a bearing on certain centres of the body, which if either under- or over-developed, change mental as well as physical characteristics. They had only a vague idea what these centres were, though Hindu physicians dissected the human organs centuries ago and formed some opinion as to their functions. Today we know these centres as glands.

The thyroid (Greek thureocides, meaning shield-shaped) was known to the Greeks, though its function was wrapped in mystery. The first physician to link the work of glands with physical changes was Meckel, who did so at the beginning of the nineteenth century. Then a Swiss surgeon, Schiff, of Geneva, completely removed the thyroid glands from a number of animals, and they all died. Some years later Ord and Sir William Gull did research on the subject and slowly it dawned on the medical fraternity that glands were responsible for a great many changes that physicians did not understand, and for which they could find no cure. An entirely new field of investigation was opened, and today tremendous advances are being made in this branch of medical science, about which, of course, there is still an enormous amount to be learnt. The story of glands is so enthralling that no layman who wishes to understand the

workings of his body should be without at least one non-technical book on the subject.

I make no apology for introducing the subject, and dilating on it, for yoga postures are supposed to have a powerful effect upon the interstitial, which they tend to rejuvenate, and in doing this increase the span of life and give the body added vitality. If this gland does not function properly, Man not only loses his will to live but grows senile and becomes gaga. It is mainly the interstitials that send the vital spark surging through the body cells and maintain the mind at its peak of efficiency.

In the past, before the functions of the glands were known, troubles that may have been glandular in origin were called "humours," and the patient was said to be in "a decline." Many such ailments were cured when diet was studied and vitamins and mineral salts properly ingested for so great an authority as Sir Robert McCarrison, M.D., D.Sc., F.R.C.P., points out, "The more perfect the constitution of the diet, the more normal is the thyroid gland, both as to its size and as to its action."

But there still remained ailments that buffled doctors. We now know that they were nearly all due to glands that did not function properly.

The three yogi postures, Easy Pose, Perfect Pose and the Lotus Seat, help to keep the in restitial gland healthy, and this is only one reason why the maximum benefit cannot be obtained from yoga breathing and postures if they are not mastered.

The mudras, too, keep these glands healthy and strengthen them. Other poses and breathing exercises affect other glands, and that is why it is well to 1 now something about these organs.

Glands fall into different categories. One class consists of the lymph glands, whose function it is to protect the

body from germs and harmful substances. They act as filters for the lymph, a colourless fluid that flows in certain channels and collects waste matter from the blood while passing out nourishment into the tissues.

Another are the glands of elimination, which get rid of waste matter from the tissues to the outside world. Into this category fall the sweat glands, sebaceous glands, the kidneys and the mucous glands. A third are the glands of assimilation which help to absorb the food eaten, and digest it; glands of the mouth, salivary glands; glands in the stomach, intestinal tract, the duodenum, liver and pancreas. Finally, there are the ductless glands, so termed because their juices or secretions are not poured into ducts, but into the blood stream. They are also known as endocrine glands, from the Greek krinein, to separate.

The secretions that these glands produce are called hormones (Greek hormaein, to urge, stimulate), which are so powerful in effect that they can change body, mind and personality, and convert one type of human being into something entirely different. Their effect is sometimes as striking as that supposed to be produced by the wand of the old-time magician.

Do not run away with the idea, however, that the mere injection or taking of gland extracts will change you from a sick person to one pulsating with energy; from a weakling to a Hercules; from a half-wit to a mental genius. So much rubbish is written by sensation-loving scribes that the layman may be excused if he gets this notion.

It has been shown that when the impulses along certain nerves called the "automatic nerves" are released they cause changes in the blood by setting free minute charges of strong chemicals. Thus it will be seen that a person whose "nerves are frayed" is conducting a poisoning campaign against himself. This applies to all evil emotions.

All emotions affect the nerves and glands, which discharge either harmful or beneficial substances into the blood, thus causing illness or helping to cure, as the case may be. Thoughts and emotions change one's physical appearance over a period of years; thus a cunning, scheming person takes on a crafty look, and happiness and generosity shine from a good humoured face.

This theory was known to the yogis for centuries. It was on this foundation that they erected their practice of yamas and niyamas (restraints and observances), as well as their entire system of mental hygiene.

An understanding of the ductless glands and an appreciation of their functions will, therefore, help you in the study and practice of yoga. When an intelligent person knows how the inside of a car works he can drive it more efficiently than if ignorant of the machinery. He treats the gears with care and does not crash them; he doesn't jam on the brakes till the linings sizzle and tires screech. And when you know why your glands are placed in the body, and are given exercises to keep them fit, then you will realize their importance and do your utmost to keep them working efficiently.

One of the curses of the present age is that people expect everything to be made easy, little realizing that anything worth having must be worked for. This applies also to knowledge, which is so often purveyed in the form of pictorial articles and "digests" with all the dull but sometimes essential portions deleted. One gets only the cream and jam; and too much jam and cream form a nauseating diet. The popular press has given the ordinary man an utterly erroneous idea about such things as vitamins and glands. Many people imagine that all they have to do if suffering from some deficiency is to rush out and buy a box of pills, or take a course of injections, and all will be well, no matter how wilfully they abuse their bodies.

Never lose sight of the fact that reasonable care of body, mind and spirit is essential to health und happiness.

Let us first learn why the ductless or endocrine glands are placed in the body; then we shall see whether an injection or two will remedy a deficiency, or whether the cutting out of part of a gland will decrease the hormone if an excess is being secreted.

The glands we are concerned with in this chapter are the supra-renal capsules or adrenal; carotid, coccygeal, gonads, pineal, pituitary, thymus, thyroid, parathyroids, pancreas and spleen. The last two are not usually classified in this category, as a good deal was known about them before the era of gland therapy.

As with organs and limbs, these glands are closely related, and a lack of balance in one is likely to affect the working of the others.

Always remember this. The parts of your body are complementary and inter-related, and when one part is affected a strain is thrown on the others, which impairs efficiency, though such is the body's compensating mechanism that more often than not we do not realize it. Bad living can't be put right by pill, potion or injection. The basis of health is breathing, movement and right thinking. Only when body, mind and spirit work harmoniously is health possible.

The adrenal or supra-renal capsules weigh about a sixth of an ounce each and sit above the kidneys, but their importance far outweighs their size. The gland is composed of two parts: the medulla or kernel, and the outer layer or cortex. The adrenals secrete several hormones, the best known being adrenalin and sympathin, secreted by the medulla. When suddenly frightened or attacked, or when the body needs to make an extra physical effort, adrenalin is automatically injected into the blood, causing the heart to beat

faster, blood pressure to rise, and a shot of energizing sugar to pour into the blood. This makes you fight more fiercely or run faster, whichever you decide. The hyperadrenalin type is the tough-as-nails He-man, like the heroes in the novels of Rex Beach, Jack London and Robert Service.

Adrenalin is not a magical elixir. Its effect upon the blood and circulation gives immediate results, but when the effects wear off a reaction sets in, leaving you limp.

The medulla can be removed, and life will still go on. perhaps at a slightly lower tempo; but if the cortex of this gland is cut away, death will ensue quickly, for without cortin, a hormone composed of two metallic substances sodium and potassium, a condition known as Addison's Disease sets in. The body becomes lethargic and the victim is always tired. The skin takes on a bronze shade and he dies. Scientists have counteracted this by daily injections of hormone extracts from the adrenals of bullocks, but recently there has been an advance on this method. substance called desoxycorticosterone has been manufactured in the laboratory, and small pellets are grafted under the skin. One grafting is sufficient to give the patient enough of the hormone to last him a year. If there is either too much or too little of one or more of its hormones in these glands, all sorts of complications set in, which it is impossible to touch on in a work of this size.

The coccygeal are a tiny collection of cells situated in front of the tip of the coccyx (tailbone) at the end of the spine. Little can be said about these glands, for their function is as yet a mystery to science. Yogis say, however, that they are a centre of vitality, and that yoga breathing—when done in the Lotus Pose—strengthens and invigorates the coccygeal. Yogis claim that the coccyx is the "centre" of the body and is strongly affected by apana prana, one of the ten phases of prana. But until this is either proved

or disproved by scientific research the reader is at liberty to accept or reject the theory.

The gonads or sex glands not only control reproduction and vitality, but all thought and creative work; and a great many yoga postures and all yoga breathing aim at developing and keeping the gonads fit. The mudras, especially vajroli mudra, strengthens them; so do the bandhas, padhasama and siddhasana, and the breathing exercises bhastrika and kapalabhati. More will be said about the gonads in the chapter dealing with the preservation of youth.

All Dr. Serge Voronoff's gland grafting operations, sensationally publicized as "monkey gland treatment," were based on the gonads. An enormous amount of work has been done on these glands. The hormone secreted by the male gonads has been made in the laboratory, and is known as testosterone—synthetic male hormone. In 1939 Dr. George L. Foss, of the Royal Infirmary, Bristol, mixed testosterone propionate into a bland ointment and gave a tube to each of two patients, with instructions to squeeze about an inch (20 milligrams) out, and massage it into their thighs and abdomens every night. The result was that they lost their flabbiness, grew hairier, more muscular and more sexually potent. A boy of 18 was similarly treated. The ointment was rubbed into his Adam's apple, and in a month he developed a deep, resonant voice.

The first experiments were made on a listless, bedraggled capon, whose comb was rubbed with the ointment. In a short time the bird was transformed into a strutting, pugnacious rooster. This will not, I trust, be a cue for all the impotent men who read these words to pester me for samples of testosterone propionate, the indiscriminate use of which is likely to have drastic repercussions.

Not enough work has been done on the carotid gland, which is a collection of cells lying between the fork of the

carotid artery where it divides into two main branches on either side of the neck, to enable me as a layman to explain exactly how it affects growth and metabolism. But we do know that the carotid affects blood pressure, and as far as one can reconcile yoga with modern medical theory, it is known as *bhakimi* and has a close connection with *vishuddi chakra* of the pharyngeal plexus. Both the Hindus and the Japanese know that if a smart blow is applied to a certain point of the carotid a man can be rendered insensible, or even killed.

The pineal gland, which is about a third of an inch long and weighs no more than two grains, is situated in the brain and was called the "third eye" by the ancients. Even now scientists are not quite sure what the pineal does, and some even doubt whether it is an endocrine gland. The Hindus called it the seat of the soul. It is cone-shaped, lodged in the brain some way above the spinal column, and contains gritty, calcareous particles known as brain sand. Medical men know that when the pineal is affected by a tumour the sex glands become hypertrophied. But the yogis say that the development of the pineal gives one a sixth sense, so that telepatic ic messages may be received and thoughts transferred across space. So far no hormone has been isolated from this gland.

Today an important industry has sprung up in which chemists extract gland products from animal offals, and many valuable drugs are manufactured in the laboratory. Adrenalin is produced from the suprarenal gland and is used in the treatment of asthma and bleeding; the pituitary provides an extract that is used in maternity cases, and for shock; the pancreas provides insulin for diabetic treatment, and the thyroid an extract for the treatment of goitre. Liver extracts are produced to counteract pernicious anæmia. Glands are frozen within ten minutes of being cut out of the

animal in order that their vital products may not be destroyed, and in this way millions of lives are saved annually from offals which in the past were thrown away. These are facts.

I think that it is wrong for us to slaughter animals in order to indulge our appetites; but as animals are being murdered by the million and the handful of humanists who think it wrong can do little about it, humanity at large might as well benefit. One day it might dawn on the world that it is hypocritical as well as callous to kill creatures which in moments of maudlin sentimentality we term "dumb friends," and eat them.

Now we come to the thyroid and parathyroid glands. The thyroid is a shield- or butterfly-shaped gland that lies on each side of the Adam's apple. One is connected to the other. It is a gland about which we know a good deal. Too much thyroid and the patient develops goitre and pop eyes; too little thyroxin, which is the name of the hormone, and all sorts of complications set in. The heart beats faster, more oxygen is used, metabolism is speeded up, the victim loses weight and reserves of fat and even calcium are whittled away, though this latter symptom is due more to a deficiency of parathormone.

Fortunately, part of the gland may be cut away in order to restore metabolic balance, and if too much is excised, extracts of thyroxin, manufactured from the sheep's thyroid, can remedy the deficiency. Thyroxin increases the rate of oxidation in the body above the normal basal level.

A deficiency of thyroid has the opposite effect of hyperthyroidism and can usually be cured by injections of thyroxin or pills containing the hormone.

The pituitary (Latin: pituitari, slime or phlcgm) was so named because the ancients thought it was connected to the nose and throat passages, for this tiny gland lies at the

base of the skull and is connected directly with the brain. The yogis call it *brahma chakra*, or the ruling centre, and curiously enough, scientists are apt to think that the pituitary is *primus inter pares* (chief among equals) among the glands, for there is none so outstanding that it can be termed the ruler.

It regulates growth. Too much transforms one into a giant; too little, into a dwarf. The gland secretes a number of hormones, and scientists are not yet clear whether they act independently so that each hormone has a specific effect, or whether one affects and magnifies the effects of the others. It is packed into a tiny bony cavity called the "Turkish saddle" (sella turcia) and consists of two portions. More than any other gland, the pituitary develops personality. Enough pituitary hormones, and you possess courage, initiative and strength of character; too little, and you are doomed as one of those with a flabby, limp handshake, like a piece of wet cod, with a character to match. Too much of the hormone will, on the other hand, change you into a violent, bullying, ruthless character.

Then there is the thymus (Greek thumos, thyme), which resembles a thyme bud and lic and the chest. There is some doubt also whether this is one of the ductless glands proper, though scientists know that it is linked in some way with the functioning of the gonads. According to V. H. Mottram, it is largest at the age of two, begins to grow smaller during puberty, so that adults merely have traces of thymus. Too much thymus in adult life results in a weakening of sexual activity.

Though both the pancreas and spleen are endocrine glands I shall not dwell on them, for they have functions other than the mere secretion of hormones. It will be seen from what is set down that the glands regulate growth of the body, speed of metabolism,

and development of character as well as personality.

We know that a cretinous child can, by the administration of gland extract, be changed in face and figure, and that its mind can be made to function normally. And what is more, the hormone injected into the child may be taken from a *sheep*! This is in keeping with yoga, for the yogis have maintained for centuries that mind and matter are of the same stuff, and that all living things are related.

We do not know how they devised their exercises, but the asana called sarvangasana is said to have a beneficial effect on the thyroid, and so has the chin lock, known as jelandhara mudra. Some Hindu practitioners say that sarvangasana is a substitute for thyroid treatment, but without much more positive evidence one should hesitate about accepting it.

Matsyasana, or the Fish Pose, is supposed to affect both the thyroid as well as the parathyroid; and Salabhasana, or the Locust Pose, the liver, pancreas and coccyxigeal glands. One authority claims that Mayurasana, or the Peacock Pose, is equal to an injection of adrenalin, and though it does banish sluggishness, no one who is not already very strong in proportion to his weight can possibly accomplish it.

I would be the last to wish to deny such claims. It may be that the asanas affect the internal organs which in their turn have such a powerful effect upon the glands; but I prefer understatement, and so dislike extravagant claims that I hesitate to attribute powers to any exercise that it does not possess, and which has not been proved beyond all possible doubt.

Readers of this or any other work should adopt a cautious, critical attitude and refuse to accept claims until they are verified. I am sure that adepts at yoga can perform many amazing feats, but I refuse to accept without question their reasons for specific performances.

# CHAPTER VII

# THE NERVES

EVERYONE should learn how his body works. He should know what happens to the air he takes in and breathes out; how and why his blood circulates; and what happens to the food he eats. He should know a little about the main organs of the body; about his skin and hygiene; and he should have some knowledge about the glands and the nervous system.

By the time he reaches 40 he should know by experience the foods that are good for him and those that are not; whether he needs more than the normal amount of sleep or less; and he should adhere generally to those habits that keep him in sound health.

A little knowledge is dangerous thing if only after imbibing it you imagine yourself to be an expert. If you know a little and understand that perfectly, and if you realize your limitations, then your knowledge can do you naught but good.

You won't learn much from doctors, for there seems to be a conspiracy among medical men to keep all laymen—and sometimes their own colleagues—in the dark when consulted. Even so eminent a physician as Dr. Henry E. Sigerist, Director of the Institute of the History of Medicine at Leipzig from 1925-32, and later of John Hopkins, author of an eight-volume History of Medicine, complains that he has been a victim of such a conspiracy.

When he spent two weeks in hospital for observation his colleagues refused to enlighten him about his blood pressure and other details. "I strongly resented the secrecy of my colleagues," writes Dr. Sigerist in the Atlantic Monthly (January 1952), "which implied either that I had never heard of the fact that a man is mortal, or that they consider me a highly neurotic individual who could not be told the truth, and this I am decidedly not."

Incidentally, when he learnt from another source that he had only a limited time in front of him he accepted the verdict calmly as a sensible adult should, and retired to Switzerland, where he is now engaged in putting the finishing touches to his life's work.

Complete secrecy was all very well when men could neither read nor write, and imagination and faith played so much greater a part in healing than it does today. But now we have ways of fathoming the truth for ourselves, and if a man discovers that a doctor's diagnosis is faulty, or that the man will not explain because he does not know, then he loses faith and consults another physician. And for doctors to try to baffle an eminent colleague is merely childish and irritating. Such a lack of elementary psychology is woeful, for one of the aims in sickness is to calm the patient's mind, and in many cases this is just what the doctor does not do by erecting a barrier of silence.

Recently complaints have been ventilated in the Press that in hospitals doctors have an obnoxious habit of discussing, with colleagues and students, patients' symptoms round their beds, during which the sick are treated like laboratory specimens. Some patients feel insulted and grow enraged. Up goes their blood pressure, their nerves grow frayed and much of the good that the hospital is trying to do is undone.

One enormous countrywoman I know who suffered from

a typical "nervous rash" was asked by an Oxford specialist to undress, and exhibited to a group of students. They looked at her shyly and she glared at them. Nothing was said. After a minute or two of embarrassed silence she changed her position and folded her arms. Still not a remark. Finally she could bear it no longer. "Like one b—monkey," she barked, "watching another!" The students were convulsed.

This barrier of silence regarding the symptoms and progress of a patient is sometimes dangerous. "How often one comes across people," says Professor R. M. Titmuss, Professor of Social Administration at London University, "who have been discharged from hospital, bewildered and disillusioned because the medical magic has not yielded results, ignorant of what the investigation has been, what the doctors thought, and what the outlook is in terms of health and life.

"If one analyses the results of nospital experiences of ex-patients, it is interesting how often this complaint of the discourtesies of silence recurs Why is it not understood that courtesy has a therapeutic value?"

This is only one way in 'hic' nerves are frayed, and it is a pity that it has to be achieved in hospitals.

What are these nerves? Why do they get frayed? And what happens when this condition is apparent?

People often talk about their nerves getting frayed, or about others getting on their nerves, without having any idea what nerves are, or what functions they perform. Years ago, when I lived in digs, I often said to my landlady, "And how are you this morning?" She always returned the same answer: "I'm all right in meself, but me nerves is in rags." Then would follow a detailed list of symptoms. Her stomach was out of order, she couldn't keep a scrap down, "aot if you paid me, I couldn't"; she had a touch

of neuritis here, or lumbago there. Yet she always bravely insisted that she was all right in herself! Why?

Because the layman does not consider nervous diseases as real illness. They are something that a fortnight at the sea, or a sniff of country air, or a tonic in a bottle should put right.

But nerves are extremely important, and they are at the root of many more diseases than we imagine. Without them you could not feel, hear, see, talk or smell; you could feel neither pain nor pleasure; nor could you move so much as an eyelash, or even think.

The study of the nervous system is comparatively recent, though entirely from observation Descartes established the theory of reflex action some three hundred years ago. The first advance, however, was not made till Swammderdamm discovered by experiment that if the sciatic nerve of a frog is cut or pinched a contraction of the gastrocnemius muscle takes place. Legallois discovered that breathing ceased when a certain region of the medulla was removed, and Galvani and Volta were responsible for the science of electrophysiology. Galvani said that electricity was generated in the muscles; Volta that it was the product of two different metals. Each was right.

Every few years a brick was added to the edifice till today we have built a wall of knowledge about the nervous system, but a wall in which many bricks are still missing.

Great advances were possible only after the invention of microscopes which magnified nerves and cells by many thousands of diameters, and of delicate instruments which measured the faint impulses of currents that carried messages from one part of the body to the spinal cord and the brain, and then relayed them to the muscles and organs.

It is not my purpose here to give even a broad description of the nervous system. That may be obtained from text-

books on physiology and anatomy which may be borrowed from most public libraries; but as many otherwise well-read persons know nothing about the nervous system, it would be as well to give some idea how it works; then to show how our theories differ from those of the yogis, and finally to touch on yoga practices which strengthen the nervous system.

The nerves are extremely delicate fibres. If you have a tooth extracted your dentist might show you the nerve channel; and if he kills or extracts the nerve from a tooth he may exhibit it for your benefit. For something that gives incredible pain the nerve is a singularly disappointing structure; an extremely thin, pearl-grey thread. But though it looks threadlike, it is composed of hundreds of cells.

There are two sets of nerves: peripheral nerves and the central nervous system. The whole nervous system is far more like a telephone system than the layman imagines.

Suppose someone pinches, pricks or even touches your skin. Instantly a message is flashed from the skin to a part of the spine from which radiate the nerves that control that section of the skin. From "ere the message is relayed to a specific section of the brain; and back comes a further message ordering limbs and muscle" to move. The entire process is so rapid that you don't think about it. The impulses that flash along the nerve fibres move, so Hemholtz proved in 1850, at a rate of about 90 feet a second, so that messages from the most distant parts of the human frame take only an infinitesimal part of a second to reach the brain and return.

When ultra-rapid movement is necessary—when the body is in grave danger, or a sudden attack threatens—the sensory nerve carries the message to the spinal cord; but instead of the message being carried on to the brain and

back, it passes to another nerve and then straight back to the muscles that make for movement. The instantaneous movement resulting from this by-passing, such as raising your arm automatically to ward off a blow, jumping or ducking when you hear a shout or loud bang, could not be carried out if one had to wait for the complete operation and a message from the brain.

The nerves are carriers of sensation, and of all sensations pain is the most valuable. Pain is a friend of man. Without pain we would fall ill easily and die long before the allotted span, for pain throws out the warning signals that enable us to take precautions that will prevent disaster overtaking the body.

Pain, no matter how slight, is a warning, and you should heed it if it persists. A pain in the head does not necessarily mean that you have suffered a head injury. Your stomach may be out of order; you may be constipated; or it may just be that your eyes are strained. If you wear high heels and so throw your spine out of line, a headache may result, or you may suffer from stomach troubles or some form of rheumatism. Pain does not mean that injury has been suffered in the exact spot where it is felt. Whatever the cause, take steps first to alleviate pain; then get to the root of it and eradicate the trouble. When that is cured, the pain will not return. Alleviation alone is dangerous.

If pain is severe, as in the case of sciatica or toothache, by all means take something to relieve it, but don't let it go at that. Always find the cause, otherwise you will keep on doping yourself with stiffer doses each time, and not only the condition, but the pain will grow worse. And the penalty of neglect is often death.

Pain is one of our best friends. And when your friends warn you, you should listen. Live a life of moderation and you will seldom receive such warnings; indulge in excesses

and you will constantly be at the dope bottle, taking pills and potions.

Anæsthetics are a wonderful discovery and most of us have at some time been grateful for a shot of pain-killer, especially when having a tooth drawn or before an operation. But dope deadens pain so quickly that women more easily than men make use of pain-killing drugs. Use them sparsely.

It is also along the nerves that pleasant sensations are conveyed. These sensations give rise to pleasant emotions, which in turn cause the glands to secrete substances into the blood that benefit our bodies.

What it is that conveys an idea into a thought and then into a physical reaction no scientist has yet discovered. Nor does anyone know how feeling and emotion are transferred into thought. If you receive a severe blow the accompanying pain is natural, for body cells have been injured and they send their messages along the nerves to the brain; but why does an instantaneous feeling of fear often also accompany it?

What we know as the physical and the mental are so inextricably entwined that it is impossible to separate them, and many mental ailments have a physical basis, just as many physical ailments have a mental origin. The key to sound health is the realization that mind and body walk hand in hand; and the magic formula for ecstasy is the knowledge that body, mind and spirit are one. It is this elevation of the spirit, which the human race alone seems capable of achieving, that raises us above the beasts of the field. Or so we imagine, for some animals, like monkeys, dogs, horses, cats and elephants, seen to a limited degree, to use their brains to think, and in Malaya some monkeys who were trained to climb trees and fetch coconuts were classed as civil servants and paid accordingly!

It is this spiritual power generated within us by our own thoughts that has enabled men to survive concentration camps, long periods of solitary imprisonment, and brutal treatment that would otherwise have destroyed both body and mind. It is this that keeps the mind sane when it should have gone crazy. Every man has this germ within him and can develop and foster it, not necessarily by yoga. But yoga lays down a technique by means of which it may be accomplished, whereas every other method seems more or less haphazard.

What strikes one as being so wonderful about yoga is the fact that whereas European scientists have only recently found out about and realized the importance of the nervous system, the yogis had a profound knowledge of its workings before the birth of Christ.

Sigerist says, "It is very unscientific to deny the experience of two thousand years, merely because we have no readymade theory that explains all phenomena in detail. It would have been foolish to deny the existence of lightning because electricity was not yet known. Experience has preceded science more than once."

The yogis did not treat the nervous system as something apart from the body. They realized centuries ago, even more than we do today, that breathing and the nervous system are closely linked, and that one affects the other, and that both affect the action of the heart and stomach, as well as the organs, glands and emotions.

They called the nerves *nadis* and said that vital energy passed along these delicate channels. They claim that yoga breathing exercises purify the *nadis* and keep the entire nervous system functioning efficiently. They say that *prana*, that portion of air that gives one vitality, passes along the nerves as well as through the veins, and though this theory is not acceptable to medical men, yoga breathing

certainly has a rejuvenating effect that no other type of breathing or physical treatment achieves.

Yoga breathing can and has cured many a case of neurasthenia; it has revitalized many a jaded body and given many an enfeebled mind vigour. Proof lies, therefore, in results, than which no better vindication can there be.

The centre of the nervous system, according to yoga teaching, is *sushumna*, or the spinal column, which accords with orthodox teaching.

According to the eminent American surgeon, George W. Crile, the solar plexus is the brain's counter-point, and is known sometimes as the abdominal brain. It is in this region that one most feels extreme fear, excitement and tersion, and it is this area that is most disturbed when one vanits. Violent explosions of the solar plexus affect the entire body, sometimes most beneficially, and the shock so caused, for instance by violent vomiting, has sometimes been sufficient to restore an insane person to normal.

We have only recently discovered the connection between the solar plexus and the mind, though boxers have long known that a powerful blow in this region so numbs the nerves that the body is rendered temporarily inactive.

How did the yogis hit upon all this centuries ago? According to them there are eleven pairs of cranial nerves or nadis, the longest the right vagus nerve which reaches to the solar plexus or kundalini chakra. The force flowing to the solar plexus is known as "serpent power," and traditionally, is supposed to be coiled. There are special advanced and complicated exercises for awakening the "serpent kundalini." The term serpent kundalini is one that baffles readers new to yoga when they run across it, for books on the subject are never explicit.

One of the aims of advanced Hatha yoga is to control the sleeping kundalini, so that one is able, to use the

picturesque phrase of the ancients, to "catch her tail as she rises." But to do so, one must master all the bandhas and mudras, and spend many hours over breathing exercises, to bring the upper and lower vagal centres under control. Then only can the working of organs ruled by the automatic nervous system be suspended. I have discussed this matter with doctors in Britain, who assure me that it is well beyond the power of normal man by any process known to medical science. But in About Yoga I have cited cases where this has been achieved by yogis in the presence of medical witnesses.

It is outside the range of this work to explain how kundalini may be roused so that you can catch her tail, for hours of work each day for many years would be necessary, and such a regimen would be beyond the power of any normal person. To do so, you must dedicate your life to the practice of yoga.

The *bandhas* are mentioned, however, in this book. I practise them daily before taking my bath—*uddiyna bandha*, *nauli madhyama*, *nauli vama*, and *nauli dakshina*—and thirty seconds, which is approximately the time I give to them, is sufficient to keep my stomach lean and flexible and my bowels free.

Anyone, as I have stated, can master the first of these easily, and that alone will tone and strengthen his stomach and nervous system.

I have explained in a former volume the yoga theory that the breath taken in through the right nostril, which flows along the right nadi, is "hot," and known as the Sun Breath or Pingala; and that which flows along the left, known as Moon Breath or Ida, is cool. Hot and cool are merely convenient terms, but I feel that they should really be positive and negative, for I am acertain that prana is some form of electrical power.

For some time I have noted carefully the changes in breath from one nostril to the other. If in good health one breathes mainly through one nostril for about two hours, before the breath changes automatically to the other nostril. Observe the changes in your own breathing.

When you have a cold, which is a process during which your body is trying to rid itself of impurities and so regain health, one nostril is usually blocked. If you allow the same nostril to keep on being blocked, your cold gets worse. But I've often managed to cure a heavy cold overnight merely by changing my breathing at will, while at the same time cating nothing, and drinking plenty of hot lemon juice.

All you have to do is to place the fingers of one hand under the armpit opposite the nostril that is blocked, and feel for a little lump. Press on it for some twenty or thirty seconds and no matter how blocked the nostril is, it will clear, and equilibrium of breath will be restored. Never allow the same nostril to be blocked for long stretches at a time.

Always when you have a cold, fast for at least twentyfour hours, keep warm, and drink plenty of lemon or orange juice with hot water. Or just hot cabbage water.

Bad eating and living habits cause colds, which are not illnesses, but curative processes during which the body is trying to rid itself of poisons, and it is little use trying to change the flow of breath if at the same time you do not change the enervating habits that cause it.

Remember always that yoga is based on common sense, and centuries of experience. It is not a form of magic or hocus-pocus, but a science.

It can't work unless you make it.

After this book was sent to the printers, the Government issued a paper entitled *The Reception and Welfare of In-Patients in Hospitals*, which deals with some of the points in this chapter.

## CHAPTER VIII

## LEARN TO CONCENTRATE

When I was in school trying to master the rudiments of geometry my teacher used to say, "Now concentrate; that's the only way to master Pons Asinorum or Pythagorus' Theorem." It wasn't; but I, an eager scholar, used to wrinkle my brow and cover my features with a tense, worried mask. I would adopt all the outward and visible signs of concentration. My eyes were glued to angle ABC, and I repeated the text parrotwise, but if you had threatened to blow my head off with a charge of puffed wheat I couldn't have told you why the sum of the squares of the two sides was equal to the square of the hypoteneuse.

How could I concentrate when far more important matters hung in the balance? Was my name to be in the list to play cricket for the first eleven on Saturday, or was I merely to be twelfth man?

Since then, by much application, perspiration and the shedding of tears I have learnt to apply my mind instantly and utterly to any problem that assails me—with the exception, possibly, of income tax returns. It's a useful faculty. If I have a letter or an article to write, a job to do about the house or some piece of business that demands my attention, I can dismiss everything from my mind and tackle it.

The ability to concentrate is rarely a gift. A few geniuses are born with it. In most cases it is a prize to be earned by

considerably personal effort, and I, being a very ordinary person, have had to work very hard. If you read that anyone can teach you to concentrate quickly and easily in a matter of days, don't believe it. The ability to concentrate, unlike the art of making love, does not come naturally.

It is well worth learning to concentrate, for without the ability to do so all study is turned into drudgery, and memorizing becomes sheer mental purgatory. In order to concentrate you must empty your mind of all extraneous lumber so that you can deal only with that which you wish to consider. When this is achieved, the information that you acquire remains in your brain and can be recalled just when you wish to use it.

The ability to concentrate is invaluable to students, and later in life to those who have to wrestle with business, social, political, religious and other problems. Recently Steven Hardie, former Chairman of the Nationalized Steel Corporation, said that concentration is the key to success. "Concentrate until you can make yourself master of your subject. If you can master one thing, you can master anything."

I don't agree with his logic, but the germ of the idea is excellent.

It is impossible to advance any distance into the study of yoga without learning how to concentrate, for unless you can control your thoughts, set periods of meditation are impossible. And those who practise yoga should meditate each day for a few minutes on current problems and their own dealings with others. As you progress, you must learn to think clearly and logically, and unless you can concentrate, that is impossible, for your mind wanders like a serpent and jumps like a pea on a kettle drum.

The mind is more difficult to control than the body. You can see an arm or leg, and if you wish to move it,

your muscles respond to commands from the brain. But you can't see or feel your mind; nor can you order it about. Or not at first. If you tell yourself, "I don't want to think of a hippopotamus," instantly you think of nothing else but hippopotami of all shapes and sizes. The mind is so elusive and perverse that one may well believe it to be feminine. But it has a quality of permanence and a material basis.

Yoga breathing is an aid to concentration. In addition the yogis designed special exercises to assist one to concentrate. Do them slowly and gradually and don't be in the least bit anxious to race from one to the next. Proceed gradually and don't be disappointed if you find you can't control your thoughts after the first week or two.

Any art or science learnt easily is easily forgotten. Information acquired in small instalments over a long period is seldom lost. That is why old people, whose minds sometimes fail, can remember the lessons they learnt when very young, and the experiences that befell them in early childhood. Who, for instance, ever forgets the multiplication tables?

All that you experience throughout life is tucked away somewhere in your brain; but it can be brought out and focused on the plate of memory by those who know how. Everything you do and see, and all that you experience since birth, even though you may have forgotten it, has some effect on you, and makes you what you are.

The yogis, and in fact all Hindus, refer to this as *Karma*. the inexorable law of cause and effect.

The best position in which to do exercises that help you to concentrate are the Easy Pose, the Perfect Pose and the Lotus Seat. If you can't manage these, sit on a straight-backed chair with your feet firmly on the floor, hands resting gently on your knees and your spine pressed against the back of the chair.

Breathe in and out, gently and rhythmically.

1

Any bright or shiny object is useful in helping you to concentrate. It may be a large bright brass drawing-pin stuck into the wall at about eye level, or the polished copper bowl of an electric fire in which the element is aglow. Focus your gaze on the drawing-pin, or on one of the flections in the bowl, and gaze gently at it. Don't try to think about anything in particular; but let your thoughts wander as they will.

After a while—perhaps days or weeks—you will discover with a shock that you are thinking of nothing in particular: in fact, about nothing at all! Your mind has emptied itself and is ready for such thoughts as you wish to place in it.

Do this exercise before going to bed; in your pyjamas, for at first it will make you relaxed and sleepy. It is one of the preliminary steps; crawling before you learn to walk. It gets you into the habit of really seeing things; a habit that is dying because of the speed at which we live. As the trainp poet Davies says, "We have no time to stand and stare."

At first, this habit of gazing at a shiny object induces sleep and makes you ready to crawl between the sheets; but as you get used to the exercise the sleepiness wears off and your mind merely becomes relaxed and receptive.

In the early stages your thoughts will jump about and leap from one subject to another. Let them. Gradually you will find that you're not thinking of anything in particular. It is then ready to be filled with the thoughts you wish to think! Such is the perversity of the human brain. It cannot be forced and persuasion is necessary.

After some weeks, substitute a candle for the shiny object. Place it on a stool or small table so that the flame is at eye level, and watch it grow and swell. Look at the root and the tip and see the differences in colour. Did you know before exactly what a flame looked like; where it began and ended?

There are some who have lived in the world for sixty or seventy years but have never really savoured life. They have never taken the trouble to watch a cloud floating in the sky or followed its contours. They have never gazed at the edges or the middle and seen the different shades of colour. They have never watched the sun dipping like a blood orange below the horizon, or gazed at the moon. They haven't wanted to do these things because they're not interested. Their minds are too filled with other and more personal matters, and they have no time to observe or to concentrate.

Moon and sun gazing are part of the yoga system for strengthening the eyes and for increasing the power of concentration. But, as I explained in my previous volume, never gaze at the sun except when it is about to dip under the horizon, or just when it is coming over the top, otherwise irreparable harm may be done to the eyes.

The dullest subjects in the world may be made interesting if you understand them, and the reason for their existence. Interest and understanding, then, lie at the root of concentration.

If, therefore, you are in the unfortunate position of having to do a job that is boring, find out why it has to be done, as well as its importance, and you will look upon it with different eyes.

When engaged in any task, take time over it and do it well. That alone is an exercise in concentration. Good craftsmen work unhurriedly. They see, think and plan before putting a finger to the job. You must give time and attention to any work in order to produce first-class results.

Remember what the Bible says, for much in that book is consistent with yoga. Turn to Ecclesiastes i. 4 and read, "One generation passeth away and another generation cometh; but the earth abideth forever."

When you have a task to be done, do it with all your might, for according to Ecclesiastes iii. 1, "To every thing there is a season, and a time for every purpose under the sun."

The Preacher says, "I know there is no good in them, but for a man to rejoice and do good in his life.

"And also that every man should eat and drink, and enjoy the good of all his labour; it is the gift of God."

Concentration results in pleasure, not in irksome labour. To enjoy anything you must take your time about it. Children know that without being taught it. They concentrate on their sweets and lick them slowly, getting the full sayour.

In order to learn how to focus your mind you mustn't cay, "Now I'm going to concentrate," and then try to fix your thoughts. You might succeed, but the effort will be extremely wearing. It is difficult to shut out thoughts at will unless you have acquired the habit gradually. Then it becomes second nature.

Aristotle had this gift. A chatterbox visited the philosopher, but after rattling away for some time realized that the great man seemed inattentive. He rose with an apology. "I am sorry to have disturbed you," he said.

"No, really," assured Aristotle, "you've done nothing of the sort, for to tell you the truth, I haven't listened to a single word you've said."

Aristotle, like all great thinkers, could, once he applied his mind to a problem, shut out everything else.

If you can't concentrate, it means that you haven't the gift of seeing things properly; of observing. Look out of

the window. What are the colours of the tiles on the roof opposite? Are they pantiles or not? What are the most prominent objects on the skyline; trees, a church spire or a chimney? It isn't important whether you know or not. What is important is that you've got into the habit of looking at everything in life in a superficial way.

An excellent exercise in concentration is to sit or lie on the bank of a stream and gaze into the water, watching the river-life go by. Don't look at anything in particular; but your attention will soon become fixed.

We are told that the philosopher Kant used to sit at his study window gazing on two tall trees in the distance and ultimately this grew into such a habit that he could not think unless he impinged his consciousness on them. One day he learnt, to his dismay, that the local council intended to cut down the trees. He wrote explaining his reason, and asked them not to do so, and being a more understanding body than most local councils, they desisted.

Contemplation leads to concentration, and is in itself a form of study. When Jean Baptiste Lamarck was invalided out of the French army, he lay on his back in an attic in Paris, his only view of the outside world being through a skylight. For hours he gazed at the clouds, watching their changing shades and formations; and as he lay he connected different types of cloud with changes of weather. It was this sick-bed contemplation which grew into a passion, and when Lamarck was well again, he did not re-enter the army but embarked on a scientific career and became the foremost naturalist in all France.

Students of yoga are advised to picture the letters O M, about 2 feet high, preferably in green, because green is a restful colour, and focus their attention on them; at the same time repeating the syllable OM! in a resonant manner. This, they say, helps one to learn to concentrate; but the

exercise is best done in complete privacy, for if you do it in a train or a bus you're likely to be locked up.

Most of us have an overflow of nervous energy, and any act that absorbs this energy, or diverts it into other channels, like sucking a pipe, twiddling your thumbs, knitting—or as the Arabs do, stroking beads—helps concentration. When George Giffen saw W. G. Grace stroking his vast beard, he knew that the Old Man was trying to concentrate.

"Now the cunning old toad," he used to say, "has something up his sleeve." And more often than not he was right.

All great scholars are men who have learnt to concentrate so strongly that when immersed in their thoughts they become oblivious to their surroundings and extremely forgetful about ordinary matters—thus the stories about absent-minded professors.

Thomas Huxley was one of these. Once while at the barber's he became so absorbed in a problem that when his haircut was finished he continued to sit in the chair. The barber, who knew him well, thought he was dozing. He waited five minutes, then tapped him gently. "Sleeping, sir," he said.

Huxley gave a start. "Certainly not! As a matter of fact, I am quite near-sighted, and when I removed my glasses I was no longer able to see myself in the mirror opposite, so naturally I assumed I was at home."

When you have learnt to clear your mind of lumber you must fill it with something worth having. You must first have an impression, a vivid impression, of the picture-word, illustration or event—that you wish to retain. Which means that you must have no other picture, in your mind, or one will be superimposed on the others.

"If there is one thing I have learnt that is more important than anything else," said Eugene Grace, President of the Bethlehem Steel Company of America, "and which I practise every day under any and all circumstances, it is concentration on the particular job I have in hand."

The first rule in concentration is, then, to get a clear impression; one that cannot be eradicated. The first impression is often the most important, so let it be the most vivid. Let the image you see be the correct one; the one you desire most to retain.

If you wish to memorize poetry, first read the piece you wish to learn. Then get the meaning clear and establish the rhythm. Think what it is about and consider why one line follows another. Let it mean something and let your eyes follow the shape of the words and the length of the lines.

Meaningless repetition is pointless. It takes much longer for the words to register themselves on the plate of memory. Make sure that you get the right visual impression first; then the sense, for sense registers itself on the brain almost as much as an image seen. Hew realize this.

If, for instance, I come across the word mctamorphosis for the first time, it will be much easier for me to remember that it means "transformation of form or character generally," if I break it up into its component parts: meta, from the Greek, meaning change; and morphe, meaning form. Then I use the new word in a few sentences, for words are tools and it's not much use having a tool if you don't use it.

Look at the word thoroughly to get its shape; pronounce it correctly by consulting a dictionary; then get not only its meaning but find the roots from which it is derived. This is merely an elementary exercise in applied concentration; for when you've once done this with a word you'll not forget it easily.

Even words that are alike have different shades of

meaning, as a certain Democrat discovered when he asked Mr. Truman, "What is the difference between a mishap and a calamity?"

The President considered for a moment. "If Senator McCarthy fell from an airplane, it would be a mishap; but if his parachute opened perfectly, that would amount to a calamity."

Use words with care. You may call a female a kitten, but not a cat; a mouse but not a rat; a chicken but not a hen; a duck but not a goose; a vision but not a sight.

The more you practise such little tricks of concentration, the larger will be your vocabulary and the vaster your mental gallery of pictures. Memory, like muscle, develops with exercise; unlike muscle, it can never grow fatigued if you know the right way to exercise it.

Don't concentrate for more than a few minutes at a stretch. Richard Burton, Arabic scholar and translator of *Arabian Nights*, spoke twenty-seven languages, some fluently, yet never concentrated his mind for more than fifteen minutes at a stretch, for after that his brain grew weary and he changed his subject.

The mind is a curious instrument. We know so little about it. But I am almost certain, as I wrote in a previous volume, that thoughts have a material basis and may be imprisoned as surely as the lines and shadows on the negative of a photograph. Anyone who has studied elementary optics knows that the eye possesses the most wonderful lens in the world. It focuses instantly to distance, changes in light, and movement, and all impressions are received on the retina and instantly communicated to the brain by means of the optic nerve. And all images are stored in the brain and can be thrown on the screen of the memory, no matter how long ago they were seen, if one knows how.

That thoughts are transient energy patterns in the

Time and Space of this Universe I am more than ever convinced after a visit to the laboratories of Mr. George de la Warr at Oxford, where I was shown a photograph of a thought form. Mr. de la Warr explained that, although his normal research and standard instruments had little to do with such nebulous things, he was tempted to make a special apparatus which would record a transient thought form.

Mr. de la Warr himself opened a penknife and asked his physicist to examine it carefully so that he could retain a mental image of every line and curve. The knife was then folded and put away elsewhere. The physicist was now asked to concentrate and think of nothing but the penknife and try to retain the image for the two seconds necessary to take a photographic exposure. This was done with the physicist sitting in front of the apparatus and when the plate was developed it had on it an almost exact reproduction of the half-opened penknife which was, of course, elsewhere with the blade closed! (See Plate 24.)

Mr. de la Warr has made a number of similar experiments to prove that thought energy can be projected over a considerable distance, in one instance from London to Oxford. He is a scientist and engineer who has made a study of extra-dimensional radiations, and has taken numerous photographs of the life cycle radiations from seeds and plants.

All these energy patterns will form the aerials by which plants and trees receive Cosmic Energy from beyond time and space. It is precisely similar with our own cellular structure and organs and over 3,000 photographs have been taken of human radiations in the detection of disease, using what is known as the Delawarr Camera. Every disease has its own characteristic radiation, as indeed has every organ, and this makes it possible to detect their

radiations. A few medical doctors know of this and are using the photographic service being run by the Delawarr Laboratories, but it will take several years before this method of diagnosis is generally accepted. Broadly speaking, the process consists of using the patient's blood or sputum specimen to obtain a condition of resonance with the patient, who may even be in New Zealand. The camera is set to detect whatever condition is suggested by the doctor, and if it is present a photograph is obtained of the cell group affected, showing the location of the diseased cells. The disease radiation shows much darker on the negative than the organ radiation, i.e. lighter on the print.

A diseased condition is treated by a reverse process to the photographic one. De la Warr has devised a treatment instrument called the Coloroscope, which actually radiates curative wave-forms at the patient. If the patient is suffering from T.B. then the specific radiation of that bacterium must not be used, but a complementary antidotal one which causes the cell fission of the bacterium to cease. Coloroscope can be tuned to direct specific wave-forms at the patient which may be selected from a list of over 3,000 different cell groups and diseases. If the wave-form for the heart muscle is se' sted then only that part of the patient is in tune to the "programme". The wave-forms are projected at the patient by using a coloured ray of light as a carrier. Each wave-form requires a specific part of the light spectrum and there is a choice of over 10,000 separate colour combinations which the skilled operator has at his disposal.

Amazing? Yes. But is it any more wonderful than the mechanical trick by means of which the image of a bevy of chorus girls prancing in the B.B.C. studios is suddenly transferred to millions of TV screens in the homes of honest citizens as they recline in Roman luxury?

The only difference is that the B.B.C. does it every time with certainty, whereas we have to depend on the waywardness of memory.

How many of my readers realize that in order to see and hear, a brain is needed? Without ears that magnify and catch sound waves and a brain to register them, there can be no sound. Without the lens of the eye to focus colour vibrations and a brain which registers them, there can be no sight.

Most people have never given this aspect of the senses a thought. They are taken for granted. They don't realize that even a deaf man can think pleasant music which is every bit as real as the music he hears through his ears. Beethoven, even after he grew deaf, composed a great deal of wonderful music which he could think and imagine, but not hear. In the same way a person may conjurg up visions with brilliant colours and shapes, though his eyes are closed, or the gift of vision lost altogether.

When you read, both the sight and sound of the words—though you may be reading in silence—are registered on the brain, and if the act of concentration has been complete, it will not be easy to efface the image.

Babies do not appear to see objects and actions clearly because in extreme infancy the two eyes do not co-ordinate as they do in the case of adults. It takes about six months for the light-sensitive layer to attain growth; and the growth of the brain is even slower. When, for some reason unknown to us, this is accelerated, an infant prodigy is produced.

My first impression, at the age of five, was of punching another little boy in the eye because he reasoned that as I wore a frocklike garment I was a girl! My second, at the same age, was of standing in the aisle in church and shouting in the middle of the sermon, "I can see you,

Father Mascarenas!" at which my embarrassed mother hurried me from the scene. So, obviously, unlike Dr. Thomas Arnold, the famous headmaster of Rugby, I was not a child prodigy. At the age of three—which I cannot remember—he was awarded twenty-four volumes of Smollett's History of England for proficiency in his studies!

Both the light-sensitive layer of his eyes and the growth of his brain must have been excessively rapid.

As I have stated before, the simple art of concentration is to clear the mind so that only such ideas as you wish come into it. That is why one often has difficulty in capturing a fact or calling to mind a name or a face that has escaped one. The more one tries to force the brain, the faster all kinds of unwanted thoughts tumble into it. It is only by resting it, by relaxing completely, can the thought or idea one wishes to recollect be tempted back into the mind.

The yogi idea of firing your gaze on an object, relaxes you, empties your mind of thoughts, and gets it ready to think as you want it to.

Never force your brain.

Yoga breathing is a useful aid to relaxation and concentration. It calms you and clears your brain. It won't make you clever; only a brain of high quality will do that. It won't give you a retentive memory. Only when you master the knack of concentrating, of seeing, of understanding that which you wish to remember, will you have a retentive memory.

You must work; but it can be done. The Chinese have a saying, "What one fool can do, so can another." And, my dictionary tells me, one meaning of fool is "an emptyheaded fellow." So learn to empty your head.

If your brain isn't what it should be, don't grow disheartened. Take heart from the case of Auguste Comte, the

founder of Positivism, who lived between 1797-1857. As he was about to launch out into a public career he suffered a mental breakdown and was placed in a mental home. While he was there he thought deeply, and when he emerged a cured man, sat down and wrote without the aid of notes and entirely from memory, an encyclopædia of mathematics, physics, astronomy, biology, and sociology, in six huge volumes, which he called *The Course of Positive Philosophy*, from which men have gained wisdom ever since.

Nor may you acquire a memory like that of Yuan Van-Ting, the Venerable Teacher of 85 Springs, who knew the 74,000 characters of the Chinese language by heart; the Rev. William Milburn, Chaplain to the U.S. Senate, who could recite the Bible; William I you, of Edinburgh, who could repeat the entire contents of a newspaper after reading it only once; or "Memory" Woodfull, parliamentary reporter of the eighteenth century, who reported speeches verbatim, without notes, the day after hearing them; but the practice of yoga breathing and concentration will give you a more than normally retentive memory.

Your brain is a wonderful machine that thrives on hard work. Rest it, not by doing nothing but by changing the work it does. Switch it from one type of work to another, for mental fatigue sets in only from monotonous drudgery.

If you work it wisely you will strengthen and refresh it at the same time, and your brein will keep on functioning efficiently long after physical deterioration has set in.

## CHAPTER IX

## MEDITATION AND CLEAR THINKING

THE primary aim of yoga students is not to learn how to concentrate so that they can master complicated subjects easily. That is a secondary consideration. The chief aim is to enable them to meditate; to consider and reflect, so that they may get the best out of life. Not the most money or possessions, but the maximum of happiness.

Yoga trains you to use your mind so that you may solve such problems as beset you, face trouble when it descends upon you, and deal with contingencies as they arise.

Let us assume that you have practised Hatha yoga long enough to make you reasonably healthy, so that you can ignore your body; or if you were in very bad health, has so improved it that you can now turn your attention to cultivation of the mind and spirit.

There is nothing in yoga that is not emmently practical. Everything you do is designed to make your life fuller, your mind clearer and your spirit lighter, so that in every way you will develop into a higher type of being. There seems to be no point in human existence without this continued development, for if you do not develop to a higher level you will inevitably sink to a lower one. Nothing in the world is static; even the rocks crumble and decay.

As the body grows fitter the mind is able to develop more easily, and when both body and mind are at ease the spirit grows lighter.

What is this spirit I keep harping about? Frankly, I don't know, which seems a dreadful confession of ignorance from one who sets out to write about the spirit! It's something you can't weigh or put into a bottle, any more than you can your mind Yet I assume you possess a mind.

The brain is the seat of the mind, and the mind is that substance which enables us to think. The spirit is something else. To give it a Sanskrit name will not define it. It is that force which depresses and elevates; which drives one on when the body can go no farther and the mind reasons that it is folly to continue; it is that power which enabled men and women, who could no longer reason and whose bodies were maimed and useless, to defy the Nazis. It is that power which inspires poets, writers, composers and other visionaries; which makes the inventor imagine something deemed impossible and the mathematician solve riddles which have buffled men for centuries. It is that force which sometimes enables men to act against reason and triumph over almost insuperable odds.

Have you ever risen from your bed feeling that in spite of being physically fit and sound in mind, everything looks black; or on other occasions, for no reason whatsoever, everything is rosy, and you go about whistling? This is the result of spiritual elevation or depression, and it is not entirely dependent on health or sanity. On a morning when the clouds are rosette-hued, you can go forth and conquer the world.

I am convinced that this lightness of spirit is more easily attained if the body is fit and you have learnt to think clearly. Body, mind and spirit are linked, so the yogis assure us, and when you have control over the first two you can develop that part of your ego which we call the spirit, and which gives you peace.

According to my friend Wilhelm Unger, the mind of Man in the early stages is like a jungle. As he grows older it becomes more orderly, and by impinging on it the artificial teaching and rules of society, he converts it into a formal or I rench garden, and becomes a creature he was never meant to be. It is then by a marriage of elemental forces and rational thought that he may—though this does not always follow—turn his mind into that most pleasing of all landscapes, an Fnglish garden.

When by means of the simple exercises outlined you have learnt to concentrate, then is the time to learn the knack of thinking clearly and logically. One reason is to differentiate between right and wrong, and what is more important, to do what is right. You must always be seeking the truth, for in that way hes not only your salvation but that of the world. Don't be fobbed off like the female who went to an exhibition of the paintings of Salvador Dali in New York. She gazed intently at a picture entitled, "Debris of an Automobile Giving Birth to a Blind Hotse Biting a Telephone" and then asked the painter, "What is the meaning of the telephone?"

"Madam," said Dah, "that represents the blackened bones of my father passing between the male and female figures of Millet's 'Angelus'."

"Oh," gasped the woman, and lapsed into satisfied silence.

How often people are fobbed off with answers that they cannot understand because they are frightened to admit their ignorance. Don't let yourself be one.

In yoga, relaxation is a necessary preliminary to concentration. The first stages of concentration are known as pratyahara or a withdrawal of all the senses, so that the impulses streaming through the sense organs are so diminished as to be negligible. This induces a sense of physical

and mental exhilaration and prepares the mind for the next stage, known as *dharana*. *Dharana* is merely the focusing of the senses on one point or object.

This ultimately induces a sense of ineffable peace or samadhi, though some erroneously term it "paralysis of the will." This would be a negative and even a retrogressive condition, where samadhi is a positive, progressive one.

All of which may sound a trifle complicated, but yoga is not meant to be swallowed at a single gulp. Each idea must be chewed and digested at leisure in order that it becomes part of your natural apparatus of thought.

Profound concentration, as is practised by the yogis, cannot be achieved except in conjunction with pranayamic breathing, though concentration for comparatively short periods can be achieved by other means. With pranayamic breathing one may hold the mind static for as long as 108 seconds, and when one is proficient at diarama the period may be lengthened to 1,296 seconds; and in dhyana, the seventh stage of concentration, the mind may be held for twelve times that period.

When one reaches this stage the power of the mind is supposed to be so great that "gross" matter disintegrates into those less-than-atomic particles which comprise the whole; and in this state the yogis say that they have power over solid objects, and can control and move through them at will.

It sounds fantastic and I have no evidence that they can do this; but if they possess such power it may account for the sudden and inexplicable appearance of yogis many hundreds of miles from where they are supposed to be. I knew an English woman in Kanchrapara, Bengal, who told me that while walking in a field in Hampshire she met an Indian who told her that her husband was seriously ill and needed her. She was at the time toying with the idea of

going out; this meeting decided her and she left within a few days.

In India she came face to face with the same man, who apparently had been there all the time! Had he projected his body across thousands of miles of sea and land? My friend thought he had.

There must be some scientific explanation for such a feat; but until we are able to reduce "miracles" to scientific terms we in the West are never satisfied. We itch to explain everything in terms that we can understand, and until we can do so we scoff and say "Rubbish!" But what was nonsense yesterday often becomes commonplace tomorrow.

There are various stages of concentiation, samudhi being the eighth and ultimate stage, but when the expert achieves samadhi he finds, irritatingly enough, that there are different shades of samadhi. Don't let that worry you, for nothing I can teach you will enable you to get that far, as I am a considerable way off myself.

As far as the student of yoga in the West is concerned all this is merely of academic interest, for not one in five hundred nallion will pursue the study and practice of yoga to such lengths. They have neather the time nor the teachers.

But the mind training alone is of value, and constant meditation will teach you to think clearly.

When yogis meet in ashrams or visit the masters of the art, they indulge in discussion, for yoga is a practical study and a training for life. If it were merely a mystical study it would be worth little. A good life, they say, develops body and brain for the next step in evolution.

Yogis believe that all too ills that man is been to would vanish if only he could think clearly; for clarity of thought is not a gift most men are born with. It has to be learnt, either painfully by yourself in the school of experience,

or partly by experience and partly by teaching and discussion.

As the power to concentrate becomes easier, practise meditation. Think on the problems that affect you and your neighbours, so that you may improve them. Think on the problems of your village, town, city or country. Find out where you fit into the scheme of things, and ask yourself whether you are doing your utmost as a good citizen, parent and neighbour. Think about the cause of things; the reason for being born; the purpose of life.

Can you, a microscopic unit, leave the world a little better than when you came into it? Seems absurd, doesn't it? Yet some do affect human relations for good or evil. The small influence you have in the affairs of your community may improve it; and if every village in the country was improved, if people did a fair day's work, acted fairly and dealt honestly, the country as a whole would gain a reputation for honesty and fairness, and would occupy a high place in world councils.

Never imagine that you count for nothing in the scheme of things, for you do The power of the wave is made up of the countless little drops in it, and its force can smash in a breakwater. The haim you do may become contagious and destroy your country. It happened in Germany when the Nazis ruled. It can happen here if you allow it.

But a cloud is also composed of innumerable droplets and the water it showers on fields and gardens brings crops to fruition and feeds and nurtures mankind. And your example, like that of Buddha, or George Fox, or Gandhi or the Rev. Michael Scott, might have profound repercussions.

People frequently run to me for advice. Rarely do I give it, because from experience I find that they don't need my help. They merely want me to agree with some line of action that they have already planned, and if my advice

doesn't agree with that they reject it. Giving advice is not only a shocking waste of time but it is harmful to those who beg for it.

Yoga teaches you to depend upon yourself.

All normal people have brains. There is no problem too difficult to be tackled and overcome if you sit down calmly, do a few minutes *pranayamic* breathing and meditate on your problem.

Place it before you. Analyse it; try alternative solutions—if there are solutions—and adopt that which seems to satisfy you. But it must be right. Never sacrifice principle for expediency, which is a common political mistake. Not only is it ethically wrong but it does not pay ultimately.

Perhaps you can't find a satisfactory solution. Accept the most likely. And if there is some penalty attached to it, accept that, too, in a calm spirit. The longest punishment is over some time; the heaviest penalties can be met. There is no limit to human endurance. And the worst, when you face it squarely, is never as bad as it seems.

The wife of a very good friend lay dying. He was distraught. So he sat down and thought the whole thing out. First he performed his *pranayamic* breathing, which helped to drive all his troublesome thoughts from his mind. Then he meditated calmly. He realized that everything possible had been accomplished and by his acceptance of the inevitable was able to make what he imagined were his wife's final moments so happy that she passed the crisis and recovered!

Don't confuse this calmness with fatalism or callousness.

I am sure that more than half the people in this world kill themselves by fear or worry. Many a wife worries when her husband goes out, feating that he will be killed on the roads as were some 40,000 people last year. Her worry should begin when he is run over; not before. Why should

she worry about something that may never occur? But most people do worry about things that never happen. Often, when they happen, they are not as dire as one imagines.

Almost everyone who has not thought a good deal on the matter worries about or has a fear of death. This will vanish if you sit down and think about it rationally; if you realize that your life may end suddenly, at any time, without warning, and accept that fact calmly. I read a report, just before I sat down to write this chapter, of a Mrs. Molly O'Connor, who went with her children to the quayside in Dublin to meet her husband, and was so delighted that she kissed and embraced him. As he released her she tripped, fell into the water, and the sudden immersion killed her. The chances of such an accident are one in many million?

The fear of death is one of our strongest fears. But it you study and practise yoga the fear will vanish. Realize that it is an end all must face. None can evade it. The greatest geniuses, the richest men, the most powerful rulers, the holiest churchmen—all go the same way. John Donne, the great metaphysical poet, realized as much when he wrote in 1624 "No man is an Iland, intire of it selfe; . . . any mans death diminishes me, because I am involved in Mankinde; and therefore never send to know for whom the bell tolls; It tolls for thee."

Some part of you—mind, spirit, call it what you will—that something that makes you tick, was in existence before you were born. And, as all matter is indestructible and it is a form of matter, it will continue to exist after your shell has disintegrated; in what shape or form none can say. Perhaps only as some power like electricity, which may return to the earth from which we all come, or rise into the air and become part of the lighter elements; or enter into another newly born body. No one knows. All theories are mere conjecture and your guess is as good as that of the

Pope, the Archbishop of Canterbury or the Dalai Lama.
You were not conscious of your pre-natal state, and I doubt whether death will bother or pain you unduly.

One of the qualities of the mind you should develop is imagination. It is a quality sorely neglected, but as explained in my first volume imagination can bring either immeasurable happiness or profound sorrow; it can make you ill, or fill you with abounding health.

One can exist almost on the fruits of imagination.

Imagination may be put into operation by suggestion. Dr. Bruce Bruce-Porter, a famous surgeon, found one of his patients, a girl suffering from an almost incurable disease, reading a newspaper serial in which the heroine was afflicted with the same complaint. And as day by day the heroine grew worse, so did she. Bruce-Porter hurried to see the author (who told him that he had killed the heroine off in the final instalment) and explained the condition of his patient. "I am sure that if she reads the final instalment in its present form she, too, will die. Will you change it and give her a chance of recovery?"

The author did so, and Bruce-Porter's patient, encouraged by her example, took hope and recovered too.

Imagination can be a tremendous force for good, but children, who possess it to a much higher degree than adults, are rarely encouraged to develop his asset. In fact, every effort is made to curb or stifle imagination till it stultifies and dies.

Years ago Konrad Borcovici wrote an article in the American Magazine about his experiences when marooned on a small island with a dozen others. On the fourth day they had nothing left but bread, who had not him left but bread, who had one of their number devoured with immense gusto. "I try to imagine it's sucking pig," he explained, sniffing the air, and added, "It smells good."

Each day he went through the same ritual, garnishing his histrionic efforts with remarks such as "My wife never cooks as well as this!" When ultimately they were rescued all looked wan and emaciated except this buoyant fellow, who appeared as fit and bonny as the day he was when the ship went down.

Yoga is the only study I know which sets out deliberately to encourage and develop this faculty.

Coué's idea that you should tell yourself each morning that you are fitter was an excellent one, though by no means new.

When I was in my teens I lived in a hostel along with other students, one of whom was extremely susceptible to suggestion. We soon learnt of his weakness and on occasion would conspire to pull his leg. As we met him we would remark, "Why, Geoff old man, you do look bad this morning! How are you feeling?" Or, "You should see the doctor; you're looking terrible!"

He would shuffle off and examine himself in a mirror, take a pill or two, and by mid-morning would be at the doctor's. It was cruel of us, but we were young, and youth is cruel. He succumbed so easily that we could not help ourselves.

My father had hundreds of coolies working in his jute sorting and pressing houses. As we lived miles from the nearest city, my mother did most of the doctoring. During one cholera epidemic most of the usual specifics were exhausted, so she dosed the dying with spoons of sugar into which drops of eucalyptus were added, and no more than the usual percentage died.

Imagination saved the lives of those who thought they were being given some potent medicine.

Develop your imagination as far as possible along constructive lines. Create, or try to. There is a vast difference

between imagination and fantasy and day dreaming. The world is filled with people with "Civil Service minds" (there are, of course, many brilliant men in the Civil Service) who tell you that this or that can't be done because it's never been done before, or squash with glee any scheme that is new because they haven't the imagination to see what it will be like. Sir Francis Bacon spoke truly when he said, "So long as a thing has not been schieved, people are surprised when they are told it is possible; but as soon as it has taken place they wonder why no one ever thought of it before."

Meditation breeds imagination; and imagination is the source of inspiration.

History tells us that in 1860 Countess Maldouêt approached the King's Physician, who after examination gave her a bottle of such wonderful medicine that she confided to a friend "Since taking his cure I've felt a new woman."

The friend took the cure and was rejuvenated, and she told others until the physician achieved a reputation of a veritable vorker of miracles.

But one afternoon the husband of one of his patients picked up a bottle of the clixir and looked at the label, which read:

Aqua fontis	68
Eadem repetita	17
Aqua distilata	5
Nil aliud	9.4
Iteram ejusdem	0.6
Total	100-00

<sup>&</sup>quot;How much did you pay for this concoction?" he asked his wife angrily, and when she told him he grew livid and

hurried over to the physician's house. "What d'you mean," he roared, "by swindling my wife by charging her for this; it's nothing but water!"

"Not swindling," protested the physician, "for your wife tells me she is much better. In any case, the details of the contents are on the label for all to read. How was I to know that your wife is ignorant of Latin?" The prescription, of course, read:

Well water	68
The same	17
Distilled water	5
Nothing else	9.4
As above	0.6
Total	100.00

How many cutes are similarly worked by water, a little colouring and flavour, faith and a tincture of imagination?

The British Medical Journal cites the case of American doctors who treated forty-two patients under an electrical machine for irradiating the pituitary gland. With eighteen the current was never switched; but these were found to receive the greatest benefit! Dr. Mungo Hay, of Renfrewshire, suggests that dummy pills should be given to patients who obviously had nothing wrong with them, except a desire for medicine, and said that dunmy injections had proved most effective. He also said that a doctor colleague took all the multi-vitamin capsules sent him as samples; but his family, who took none, enjoyed just as good health! (Daily Herald, 14.3.52.)

The mind is so susceptible to influence that we should take advantage of this, and not suppress imagination. If imagination satisfies, and makes you happy and well, continue to make liberal use of it. Almost our entire lives seem to be ordered by imagination of the wrong sort, starting from New Year's Day when the shops mark up the prices of all their unsaleable goods, place them in the windows with cards to show how drastically they've been reduced, and millions of housewives, their imaginations inflamed, fight like wild beasts and return home much the worse for wear but happy with their "bargains."

If Brown comes over for dinner and raves over your wine, don't distillusion him with "But it's only British sherry." If he thinks it's good, it is good—to him. It makes him happy, and if he's happy, he feels well.

One of the most unpleasant and unhappy women it has been my misfortune to know was a member of the Oxford Group and a pillar of Moral Rearmament. Instead of using her brains to think, she communed each morning with God. She believed in Absolute Truth and had the most unpleasant habit of unburdening her innermost thoughts in public. Once she asked me, "Are you honest?" and when I said I supposed I was, she opened her big guns. "Do you tell your wife everything?"

"No," I said, "certainly not!"

"I tell Willie everyth. g." she confessed, "and he tells me everything." That, perhaps, is the reason why Willie now lives contentedly in Australi with another female.

Distil your actions with imag nation. You will hurt fewer people in your passage through life. By meditation you will differentiate between the essential and the non essential. When the vicar introduces you to Mrs. Jones at his garden party you naturally say, "Pleased to meet you," or ask "How do you do?" though really you're not in the least bit pleased to meet her, or care two straws whether she does or not. These pleasant formulæ oil the wheels of life. Absolute truth would be not only

unessential but tedious, for Mrs. Jones has little interest in your ingrowing toe-nails or lumbago.

But what is essential is that you stick to principles; see that your fellow creatures are treated fairly and that a man is not persecuted simply because he happens to be a Jew, a Catholic, a Negro or a Communist; that you uphold freedom, decency and honesty.

When you meditate, question your own beliefs and the ideas you have held since childhood. Are they true or false? If they are false, are you willing to change them? Does a belief become true because you've held it for years; does constant reiteration of a statement make it true; or constant depial render it false?

When you are getting the worst of a discussion do you raise your voice, bang your fist or threaten your opponent with a black eye? Many people think that it makes their case much stronger if they do. The idea still persists that if you knock a man down, it proves that you are right. It merely proves that you are a fool and a bully.

When you decide to become a student of yoga you must ask yourself if you are really in search of truth, and if so, whether you are prepared to throw overboard your most cherished beliefs if they appear wrong to your reason.

You may, for example, belong to the Church of England. If so, do you imagine that this Church, and no other, holds the key to salvation? Suppose you had been born in Central Africa or the heart of China; the odds are that you would have held different views. In which case, would it be just and fair to condemn your beliefs?

Some adults, though they appear to be normal, seem to be devoid of reasoning ability. While I was at Brinsford Lodge, in Staffordshire, training young men to become educational sergeants in the Army, one of my students made the startling statement that every Englishman was

superior in every way to every Negro. So I asked him whether in his opinion every English person could sing better than Paul Robeson or Marian Anderson; whether every English scientist was superior to George Washington Carver; every boxer better than Joe Louis; every runner faster than Jesse Owens; and every administrator superior to Ralph Bunche.

- "Perhaps not," he admitted.
- "Then," I reasoned, "every Englishman is not superior in every way to every Negro."

"No," was the answer. "Every Englishman is superior." Incidentally, he thought that every Englishman was equal to about three Frenchmen! He was a pleasant youth, but my colleagues and I reported to the authorities that on no account should he be loosed on his fellows as an Educational Sergeant and a purveyor of democracy. The next time we saw him he was a full blown member of the A.E.C. Mysterious are the ways of selection boards!

That attitude was not confined to sergeants. I remember a colonel telling me in 1945, "We should really have allied ourselves with the Germans against the Russians, for the Russian officers are not gentlemen!"

Before accepting a statement or theory make sure that the facts can be verified. Don't reject or accept a theory because of prejudice. If you base it on a hypothesis, ask yourself, "What are the grounds on which it is based?"

Sir Francis Bacon had the mind of a yogi when he said, "I found I was fitted for nothing so well as the study of truth; as having a mind nimble and versatile enough to catch the resemblance of things and at the same time steady enough to fix and distinguish the raubtler differences; as being gifted by Nature with a desire to seek, patience to doubt, fondness to meditate, slowness to assert, readiness to consider, carefulness to dispose and set in order; and

as being a man that neither affects what is new, nor admits what is old, and that hates any kind of imposture. So I thought my nature had a kind of familiarity and relation with truth."

Yoga mind training goes even farther, but if we can travel as far as Bacon we shall cover an immense amount of ground and prepare ourselves for more exciting exploration.

Finally, try to find faults in the beliefs you hold strongly and like. It is easy to believe them. If you dislike a belief or theory, examine it well for such good points it may have and ask, "Why do others believe in it?" Only by rigorous questioning and analysis can you get anywhere near the truth.

#### CHAPTER X

# CONTROL OF WEIGHT BY YOGA

If you wish to determine whether you are over or under weight don't pin your faith in the tables given on the average weighing machine without making allowances for your type of build. They are unreliable, for they fail to take into consideration different types of bone structure. A man with small bones standing 6 feet may weigh less than another with large skeletal structure who is inches shorter. I know a man who stood 5 feet 9 inches, weighed 16 stones and had comparatively little fat on him. His wrists were twice the size of mine and he was so broad that on a bus seat there was space only for a small child to sit uncomfortably alongside. He was very powerful, and an international rugger player.

According to the tables, he was much too fat.

I know other men of delicate structure who stand over 6 feet, weigh 11 stones, are fit and wiry, and keep perfect health.

In India one may see every day of the week men with legs like bamboo struts, who carry for long distances weights on their backs and heads that would cripple the average English porter twice their size. They look as if a push would cause them to fall ar we yet they obviously possess considerable strength and stamma.

Some people have thin faces and well-covered bodies; other are moon-faced, but look feeble, flabby and round

shouldered when stripped. Never judge a man by his padded shoulders and the cut of his jacket, or a female by the cunning devices that endow her with the figure of Venus.

There is no hard and fast rule about weight. The only sensible rule is not to worry about it unless your fatness is so uncomfortable that it tires you and increases day by day. Or, if you're a woman, that it is so unfashionable as to worry you. For if you're worried, you can't remain healthy. On the other hand, you may be so thin and rickety that you're too weak for work and games, and again tire easily. So ignore all tables that calculate weight by pounds per inch of height. In everything you do, bring that rare faculty erroneously known as common sense to bear.

Only when you are in danger of becoming like the woman Clarice, in the limerick, should you grow perturbed about increasing weight.

> A female in Chiswick called Alice, Had an amiable sister named Clarice, Whose well-covered figure Burst clean through a bigger Than out-size garment of Hatris.

There are numerous reasons for increasing weight. Some are: greed, an excess of fitty food, laziness, too little hard work or exercise, advancing age, glandular maladjustment. People of naturally heavy build are disinclined to take vigorous exercise after reaching the thirties and are apt to put on flesh more quickly than other types. Some who grow too thin or fail to put on flesh eat too quickly and too much: and eat foods that either do not agree with them of are too heavily coated in grease. This is a common fault with the skinny. They desperately desire to pad their bones, and eat too many fatty foods which they cannot assimilate.

Hard work and a sparse diet rarely result in thinness. As a general rule, thin people should eat a little less, cut down their quota of fat, chew their food thoroughly, take a little longer over meals, and learn to relax.

Faulty glandular functioning, pain, worry, bereavement and lack of interest in life tend to make one thin. A Mrs. Vere Villiers wrote to a Sunday newspaper some time ago, "I tried diets, exercise, to no avail; then after an unhappy tove affair in 1947 I lost nearly two stone."

Emotions play an important part in regulating your weight, though I am afraid I cannot arrange unhappy love affairs for all my fat readers. I explained in a chapter on Emotions in a previous volume that they can kill or cure, make one happy or miserable, thin or fat.

Fat people are usually contented, and it is this mental attitude that enables their bedies to digest the food they eat; and if they eat too much, as fat reople are prone to do, they grow fatter. That is why after years of striving in business, men who succeed grow fat quickly. Worries, money troubles and constant efforts to get on keep them lean. When these vanish with success their mental attitude changes, they enjoy more leigure, can afford more and richer food, entertain more generously, and have to buy shirts with larger necks.

Few fat people sit down to and se the reasons for their increase in girth. One fat, greed, woman complained to me that she had a huge stomach because she had had three children, and was annoyed when I remarked that she was not having their all at that moment!

They regard fatness as a visitation by a malevolent Nature. They refer to themselves is plump, bonny, well covered; anything but FAT. Usually the cure lies in their own hands, but they are too lazy to do anything about it and capitulate ungracefully.

Unless you suffer from glandular maladjustment your physical state can be improved fairly quickly if you wish it. Even mild glandular adjustments can be helped by asanas.

Let us consider the question of food first, because we are very largely what we eat, and if we eat the wrong things we get either too fat, too thin, or fall ill.

Most fat people delude themselves that they are veritable sparrows as far as food is concerned. Women who are grossly overweight are usually inveterate peckers. A chocolate now, a biscuit a few minutes later, a taste of what they're cooking, and so on. In this way they eat about twice the amount that a normal person consumes—all fattening foods. Their ideas of diet fill me with amusement.

Yogis eat when hunger assails them. When satisfied—not bloated—they stop. Only civilized men ram more into their stomachs than they can comfortably hold—and pay for it.

Get this idea firmly into your head. You won't faint if you miss a meal; or two meals—or half a dozen meals. E. H. Dewey, M.D., wrote, "Take away food from a sick man's stomach, and you have begun, not to starve the sick man, but the disease."

St. Jerome in his Syrian hermitage thought three meals a week ample to sustain him, and many well-educated ancient Romans and Greeks had intervals of twenty-two hours between meals. Sir Samuel Baker, the famous big-game hunter, wrote that Abyssinian hunters used to chase all day after game, sometimes without catching any, and at night would wrap up and go to sleep in the hope that next day would bring better luck. They didn't die of fatigue or loss of energy, for morning saw them fitter than ever.

Not long ago I was glancing through James Harpole's Leaves from a Surgeon's Case Book, and was astonished at

a slimming diet he quoted from Simmond's Handbook on Diet. Harpole calls it one of the finest slimming diets known. Here it is:

Breakfast: 1 glass orange juice.

1 baked apple with cream.1 slice toast with butter.

I glass milk.

Dinner: Baked potato with butter.

Green vegetables or salad.

1 slice bread and butter.

Ftesh or stewed fruit.

1 glass orange juice

Tea: 1 glas: milk.

1 slice bread and butter.

Jam or fruit jelly.

Supper: Vegetable soup.

Potato cooked as you like it.

Stewed or fresh fruit or fruit salad.

I slice bread and butter.

1 glass milk.

10 p.m.: 1 glass orange juice.

I am astonished to find that I've been living for more than twenty years on approximately the same amount—if not less—than this famous slimming diet; and all along I've been sure that I eat too much! I give below a sample of my fare on any normal day.

Breakfast: Very weak tea, without sugar (4 or 5 cups).

11 a.m.: Cup of milk with spoon of honey.

Lunch: 1 apple and 1 pear and slice of cheese.

(14 oz. of cheese last me and my wife about

sıx davs).

Coffee (2 or 3 cups) with milk and brown sugar.

1 oz. chocolate.

The fruit at lunch varies according to the time of the year.

In summer, when strawberries, cherries, plums, greengages, etc., are plentiful they are eaten.

Tea: 2 or 3 slices real wholemeal bread and butter.

1 slice wholemeal cake.

Tea-weak and sugarless-plenty of it.

Supper: Vegetable soup (mainly in winter).

Salad with egg or baked potato and butter.

Fresh or stewed fruit.

1 glass of milk with spoon of black treacle.

Unless I've been doing something vigorous, like playing squash or cricket, I omit the fruit for supper, because three courses makes me feel too full. The vegetable soup never has the slightest trace of fat in it, and is really a broth, composed of tomatoes, a little potato, lentils, coarse oats, barley, onions, celery, carrots, parsnips, turnips, a little chopped cabbage, etc. Not necessarily all these ingredients in the same broth.

We don't hold rigidly to this diet, for my wife and I dislike rigidity in any form. Sometimes we eat a little more; at others, miss a meal or two completely. When friends come over we usually give them a cooked meal—always in winter—eat far too much, and retire like a pair of boa-constrictors. Next day we usually miss a meal. Boxing Day or the 27th December is usually a day without food, not because of any rule, but because, like most people, we feel uncomfortably full.

What I wish to stress is this: I don't eat too little or too much—it depends on your point of view—because I wish to slim. I eat the amount that agrees with me.

I am not a trained athlete and do not wish to be regarded as such. I play cricket once or twice a week in summer, an occasional game of table tennis, a game of squash once a week in winter, walk a little, swim a little, and cycle gently around, doing some shopping each afternoon. I do none of these things to keep me fit, but because I like to do so.

I never think about fitness or slimming; and if I am fairly fit or slim, it's just incidental.

To me, life isn't just worth living unless I feel well. I've had my quota of illness and didn't like it.

Had I a huge stomach I'd feel uncomfortable, so I just do without that handicap. If you have a paunch it stands to reason that there is something in it to keep it bloated. A stomach isn't a football that can be pumped up and deflated at will. When I was a boy I used to watch with ascinated amusement the banas (snopkeepers) in Rajbari, Bengal, sitting cross-legged outside their shops gently rubbing their balloonlike stomachs with mustard oil and belching in the most lordly fashion to prove how well off they were and how much they could eat. It is customary among them to tie a thin thread round the waist and eat till it snaps. That is the signal to stop.

You, too, can be a bania, but is it worth while?

No two human beings are exactly alike. That is why courses and systems sometimes fail. They cater for the normal; the average. The student a little out of the normal will carry out all the instructions and fail to get results. Yoga is a philosophy for the individual. It teaches you to study yourself. You are your own laboratory, and you can test everything you eat or do as you go along.

Two fat people can follow the same diet and one will lose weight, while the other remains fat. (Two thin people may eat the same food and only one will put on weight. Why? That is for the individual to find out. He has brains, eyes, feelings. If he won't use them, he must suffer.

The food you eat is acted on by digestive juices and broken up. It changes in form, and nourishment is taken into your body. Cellulose and roughage that cannot be assimilated are rejected; harmful products are passed through the kidneys, liver and other organs of elimination.

Your body is the most precious thing in the world—to you. If you don't study it, who will? If you take half as much interest over it as the average motorist does his car, the average angler his rods or the golfer his clubs, it will give you better service.

When you visit a doctor all he does—if he is not too busy, as is often the case today—is to drag your medical history from you, question you about symptoms, make deductions and prescribe treatment.

Let us assume that you are too fat. What will the doctor do? Will he tell you to miss a few meals or to eat as little as I do? If he does, he knows you'll go to another doctor, and in any case, very few doctors have the time or the inclination to follow the rules they lay down for others.

What does yoga offer? Eat the yoga way—when you are hungry. Begin by missing an occasional meal, preferably at midday. If you work in an office, give up breakfast!

You can't do that? You'll die! Well, throw this book in the fire. You've wasted your money. I'm not doing this to butter you up, but to tell you the truth. And the truth is rarely palatable.

Reduce the amount of fatty foods to a minimum.

Take more exercise for the mid-section of your body. Here you will find the bending and stretching asanas excellent. The fatter you are, the less inclined you will be to exercise. It needs will power, and all you seem to have is won't power.

So increase the strength of your will by concentration and meditation. Meditation will enable you to think about your fatness; to show exactly why you are fat and getting fatter every day. The yoga way teaches you complete honesty, so that you will no longer delude yourself that you are cutting down fats and taking more exercise.

The fat business man who spends three months at the

Riviera every year will tell you frankly that he can't spare the time for exercise. The answer to that is the succinct Americanism, "Baloney!" Who does his job while he's away?

Has he ever tried stripping to the waist, getting on his hands and knees and vigorously polishing a floor instead of going to the golf club? Muscles that he did not realize existed would stand out, and he would carn his wife's eternal gratitude. I've tried it, so I can speak from experience.

Dr. Josiah Oldfield tells us that while he was at Oxford he obtained a part-time job with the local council, which got him up at about five in the morning to dig holes and break stones in the road, and that kept him fit. And after a couple of hours' labour, for which he was paid, he'd return to his studies.

Yoga asanas and breathing will help the glands to function more efficiently, and if your fatness is due partly to badly functioning glands, this practice will help to regulate the secretions that flow into your blood and organs. And if you master the uddiyana bandha you need never have a paunch.

Fatness is due also to faulty posture, as Hornibrook and Leonard Williams and other authorities have pointed out; and if there is one thing that yoga stresses, it is faulty posture. The way you sit and wal: both help to keep your weight down.

In his Hunterian Lecture on "Man's Posture," Sir Arthur Keith said, "The supporting structures are the muscles of the belly wall; particularly is the transversalis muscle important in this respect; it is a living belt which girds the loins."

It is this belt that is stretched and developed by asanas such as halasana (Plough Pose), ardha-matsyendrasana

(Spine Half-Twist) and paschimottanasana (Posterior Stretching), and, of course, many other advanced poses.

Those who suffer from weak backs and kidney and liver troubles will also benefit, for these postures squeeze and exercise the kidneys and strengthen the back.

It is elasticity of the stomach and waist that is important, not mere hardness. Hard stomach muscles without elasticity are a danger to health.

Learn, if possible, to do the Easy Posture as well as the Perfect and Lotus Poses, for together with yoga breathing they will do more than anything else to correct faulty posture, and with it, many complications and troubles.

Also practise kapalabhati to strengthen the stomach. One of my friends, who has a fine baritone voice, practises this regularly, and by contracting his diaphragm suddenly can push away a grand piano. I also met a Chinese wrestler—a huge man—who so strengthened his lower stomach muscles by yoga breathing that he would invite footballers to kick him in the stomach. He would contract his muscles to coincide with the impact of the boot, and the surprised footballer would find himself on his back, nursing an almost dislocated ankle. He expected it to be buried in a mass of blubber, but it struck a wall of solid muscle!

Many factors contribute to fatness. Most women don't seem to realize that as their bodies grow fat, their feet swell in size, too. Because a woman wore size fives when a sylph of 20 she deludes herself that she can squeeze her much broader and fleshier feet into the same size shoes when she is 5 stones heavier.

Indignantly she refutes the idea that she has big feet, so waddles about in the same narrow shoes and suffers torture. She develops bunions and fallen arches and the very idea of exercise makes her cringe in agony. Because of her inactivity she puts on more weight, with the result

that her feet pain even more and she takes even less exercise.

As you grow fatter you should buy larger and roomier shoes. And fallen arches are sometimes caused by the enormous weight that presses on bones that are not strong enough to bear them.

There is a reason for all disabilities, and if you don't use your brains to think about them, and reason their cause, you deserve to suffer.

Comfortable shoes, regular exercise, vigorous massage with the hands as well as cold sponges to make the skin active and enable the pores to breathe; and above all small meals—these will combine to reduce your weight.

Get it clearly into your head that there is no such thing as a "slimming food." My wife met a very stout woman at a grocer's in the country, who watched her, buying lemons, envied her slim figure and remarked, "So you take lemons, too. I had them every morning for a year and they didn't do me a bit of good!"

Apparently someone had told the simple creature that "lemons are slimming," so she continued to gorge fattening foods while she took lemon juice every morning to counteract her enormous meals! She wanted her brain examined.

Almost every food ye. eat contains some protein, carbohydrates, fat, mineral salts and vitamins. If the protein predominates, as in lentils or 'ran n.cat, we term it a protein food; if the carbohydrate content is greatest, we call it a starchy food. Even a lettuce leaf, which contains about 93 per cent. water, has 1.4 per cent. protein, 0.3 per cent. fat, 2.2 per cent. carbohydrates, and 1.03 per cent. mineral matter, which consists of potassium, sodium, calcium, magnesium, iron, phosphorus, sulphur, silicon, and chloride. As well as certain vitamius. It is more convenient to get your proteins, for instance, from protein foods, such as

dried beans 24 per cent., kidney beans (dried) 23 per cent., lentils 25 per cent., soya beans 34 per cent., dried peas 22 per cent., cheese 23 per cent. (processed cheese has little protein); or if you are a flesh eater, from crabs 16.6 per cent., shrimps 25 per cent., liver 20 per cent., average meat or pork 20 per cent., sea fish 18 per cent., fresh salmon 20 per cent, than from lettuce.

The idea that potatoes are fattening is ridiculous. They contain from 75-80 per cent. water and less than 20 per cent. carbohydrate. But potatoes are usually fried in fat, creamed with butter and milk; or if baked in their skins, eaten with butter and margarine, and as they can absorb about a fifth of their weight of fat without affecting digestion unduly, plenty of fat is usually eaten with them. And that is why they fatten.

If you are fat and getting fatter, don't give up potatoes, which are a wonderful alkalinizer and a valuable form of energy. Eat them without fat, baked in their skin's with a pinch of celery salt and pepper. If you give up a meal or two and are really hungry, potatoes in this form will appear delicious.

Hunger is the best sauce. After leaving school I lived in a hostel for students, where we never seemed to get enough to eat. I was growing, and as I played games almost every moment of my spare time, was for ever ravenous. As the nearest food shop was three miles away and in the summer the shade temperature over 100 degrees Fahr., we used to stop the baker on his round, buy loaves and eat them without butter or jam, and enjoy them! If you are really hungry, simple foods taste best, and water is the finest thirst quercher. What is more satisfying when on a long walk in the country than rough brown bread, cheese and a small onion, followed by cool water, milk, cider or ale? Slimming is not a luxury which only the rich may enjoy.

You can revel in it, too. One reads of people luxuriating in health homes where they exist on orange juice at thirty guineas a week.

Mr. Ted Kavanagh, creator of "Itma," wrote that he weighed 16½ stones, which he rightly considered a trifle too much for his height of 5 feet 7½ inches, so carried out a fast to rid him of some 60 superfluous pounds. He drank sugarless tea, plenty of hot water and had massage, steam baths and colonic lavage. But why did he allow himself to reach that disgusting state so that he had to carry about more than 4 stones of blubber?

It needs determination and a little self-discipline to resist that chocolate éclair or say no to a second helping of steamed treacle pudding, or to push away bacon and eggs in the morning.

Unless you are a manual worker—a miner, road digger, stoker, or someone who works till he sweats, or who is constantly in the cold—you don't need breakfast. The French, Belgians and Spanish don't eat big breakfasts; just black or white coffee and a roll. And they're not all dead from malnutrition.

No sedentary worker needs breakfast. He may like it; he may eat it without getting fat; but he doesn't need it.

Large meals at midday are unnecessary. They make one sleepy and disinclined to work.

Your main meal should be eaten after work is done; when you have the leisure to enjoy, masticate and digest it. Don't drink with meals, but either fifteen minutes before or after. If you eat and drink together, you can eat more; and the idea is not to eat *more*, but to assimilate that which goes down your throat.

From the moment you read this, decide to eat a *little* less, eat more slowly, and digest what you eat, so that every particle is enjoyed and does you good. Enjoy what you eat.

The famous Dr. George Cheyne, of Aberdeen, who weighed 32 stones, found his bulk such a handicap that a servant always followed him with a chair. At 54 he decided to reduce and went on a milk-and-vegetable diet, and rode each morning. He gave up all drink except cider, and in a short while reduced to 15 stone. At 60 he was in perfect health and able to deal with bread, butter, fruits, nuts, cheese and tender root vegetables.

For years I've been studying innumerable charts and books on slimming as a matter of interest, and I find to my astonishment that what I eat normally is less than that laid down in most slimming diets. In spite of which, I can assure my readers that I am in no way under-nourished and certainly no weaker than the average man my height (5 feet 7 inches) and weight (9 stone 10 lb.); for I can stand and walk on my hands and lift without undue effort a 56-lb, weight above my head with either hand. When I was ten years younger I could lift one in each hand simultaneously; but I haven't tried to do so for years. I consider this normal. But what I wish to stress is that the small amount I cat has not weakened me.

I was told before the war—when everyone believed that no one should eat less than 3,000 calories a day—by a principal of a school of dietetics, that I would die by the the time I reached 40. Ten years have gone by, and though, of course, I might drop dead any minute, I feel fitter than I did in 1940. Or, for that matter, in 1920.

With the years I've become less active; and as my activity has decreased, so has the amount I cat. As one grows older, one naturally eats less.

The mind has a good deal to do with the amount you eat. If you tell yourself that you're going to die because you haven't eaten enough, you probably will. Professor R. A. McCance and Dr. E. M. Widdowson carried out a

number of experiments at Cambridge and arrived at the conclusion that "changes in weight do not tell us much," and that there is a considerable difference between a thin man in normal health and one suffering from malnutrition. The yogis said the same thing about 2,000 years ago.

In perfect health you should be so slim that your ribs are just visible, and when you stand creet, your stomach should be flat.

What then is my advice to the overweight?

- (1) Don't eat breakfast. If the wrench is too violent, discard one food at a time. Drink plenty of weak tea withour sugar, or unsweetened fruit juice. Or coffee if you prefer it; unsweetened, also. Far from being the harmful drug that doctors say it is, find coffee pleasant and stimulating, particularly if taken for breakfast or after lunch. slimming, take black coffee without sugar. Ultimately you will get to like it. According to Dr. Bernard Aydiner. coffee causes a gastro-colic reflex if taken on an empty stomach immediately after washing or bathing in the morning, and results in a bowel movement. The beverage contains various chemicals in organic form, which if taken to excess may be harmful; but this also applies to other drinks and articles of diet. It stimulates, just as grape sugar does, so should not be drunk at night by those who suffer from insomnia.
- (2) Eat a small lunch, preferably of saidd, or sandwiches of cream cheese and lettuce, cucumber, dates, etc.
- (3) Fat your largest meal in the evening. See that it is well balanced; that it contains plenty of green vegetables in addition to protein or carbohydrates.
- (4) Make your food as appetizing as possible. If you eat a salad, see that it has plenty of variety and colour; tomatoes, beets, radishes to supply the various reds; cucumber, watercress, lettuce, endive, grated cabbage, to

give a contrast of green; carrots for a brilliant orange; parsnips for cream; blobs of white cream cheese; black and green olives; steaming baked potatoes, dates, pineapple, and so on. There is no point in developing imagination if you don't use it.

Food is tinged with colour to attract the eye and stimulate the appetite; but the tired housewife puts all her vegetables in a great pan and boils the life out of them. Nor can I blame the poor, tired creature. But if she bought a steamer or a pressure cooker, how much simpler life would be, how much tastier the food—and the water could be used for soup stock.

A word about fat. Since 1939 my wife and I have relied mainly on our butter ration. Rarely do we take the margarine ration, except to make cakes.

The remainder of our fat intake is obtained from milk—three or four pints a day between us—cheese, black olives. This low fat intake doesn't seem to have affected my energy in any way; nor does it seem to make me thinner. I am my own laboratory and experiment on myself; and I am sure that people eat too much protein, and too much fat. And, of course, far too much starchy food and not enough fresh, green vegetables and raw fruit. I am writing, of course, about sedentary workers and not for those who do hard, manual work.

I can write only about my conclusions, and I must admit that types vary widely. What suits me will not suit everyone else.

But of this I am certain. The average fat man or woman eats far, far too much; well over the 3,000 calories advised by experts, many of whom, I am sure, just get their knowledge from books, written by others who get them from other books.

Don't take everything you read as the last word in know-ledge; even the things I'm telling you. Experiment in your own laboratory—your body—and learn from the results.

### CHAPTLR XI

## THE PRESERVATION OF YOUTH

EVER since the first human being expired, men have tried to cheat death by stretching the normal span of life. The desire to hold on to life is natural, except in rare cases when one is racked with pain or hopelessly crippled. In the Middle Ages physicians compounded elixirs and nostrums to ward off the evil hour; for men will always regard death as evil and frightening until they are certain what happens after.

I have no wish to live on when I am helpless and senile; when friends and relatives regard me as a burden; when I cannot see clearly the flowers in the meadows, hear pleasing music, discuss intelligently or enjoy life. But I feel that Man was never meant to degenerate like that. He was meant to live in good health and .ull possession of his faculties till suddenly his worn-out organs refused to work, like a watch that gives good service, and the: suddenly stops because the mainspring snaps.

Why does old age attack one? What is it that makes a man senile? Why does he feel the cold so much more as he grows older? Why are his movements slower? Why does his hearing fail and his sight grow dim? Throughout the ages men have probed into these problems and we now have some of the answers, but comparatively slight progress has been made during our tenancy of this earth, and immortality seems as remote as ever

The sensible man reconciles himself to the fact that death is inevitable and a happy release when physical disintegration sets in.

At the approach of old age men usually embrace one of two schools of thought. Either they become disciples of the hedonistic creed, "Fnjoy yeurself; it's later than you think," or having been wicked old men they fear retribution and embrace religion, embark on good works and end by having stained glass windows put up to their memory. Like the Buddhists of Burma who build temples of merit, they feel that the good they do will cancel out the evil. Some deaden their consciences by taking to the bottle, and a few read philosophy.

It may be some consolation to my younger readers to know that they will have a fair chance of living to be older than their parents, and much older than their grandparents. Alexander was 23 when he sighed that he had no further worlds to conquer, but he wasn't a young man. In those days 23 was a fairly advanced age, and the average man did not live much longer. In Britain in the eighteenth century the expectation of life was not much more than 20, and in the nineteenth century it was 35 and only 25 among the mining community. Before the war the normal expectancy of life in India was 23 and in China even less. A few, of course, reached a ripe age, but most men died early.

In Britain today one may expect to live to about 70 and in the United States a little longer.

This extra lease of life is due to better living conditions, ample supplies of fresh foods and green foods, sanitation, clean water supply, hygiene and the general advance of knowledge. According to P. H. Landis, between the years A.D. 10 and 1846 Britain was swept by no fewer than 201 famines and, of course, plagues without number; and a

child as late as the eighteenth century was lucky to survive the age of 3. Three out of four children in London died before they reached the age of 5! What could one expect when Londoners drank from the same water into which they poured sewage; sweeps washed three times a year, many of the poor not at all, and working men wore their clothes till they fell to pieces.

There were no anæsthetics and nine out of ten died while having amputations. When a man had a tooth out he was placed on the floor, and the barber—for barbers were surgeons—rammed a knee on his chest to prevent him moving.

How different things are today. Scientists are making serious attempts to find out the very nature of life. Dr. George Crile, famous surgeon and founder of the Cleveland Clinic, puts forward the theory in his book. The Phenomenon of Life, that electricity keeps us geing. He says that our bodies are made up of cells that are minute but powerful electric furnaces or "radiogens" and that oxidization produces radiant energy; radiant energy generates electric currents in this protoplasm, and as the normal and pathological phenomena of life are manifestations of protoplasm, therefore it follows that hie itself must be due to electrical energy. Dr. Crile believes that the liver, brain and adrenal glands control that energy.

We have advanced far enough to know that every part of the body does not die simultaneously. The human brain, according to experiments performed in Sweden, lives for ten minutes after death; that is, after the blood stops circulating; the heart muscles twenty minutes; the eyes thirty minutes; ears one hour; arm and leg muscles four hours; blood corpuscles eighteen hours; bones three days, and skin five days.

In America, Russia and Britain surgeons have within

the last ten years invented pumps which by-pass the blood from the heart so that it may be operated on; and Professor Mercer, President of the Royal College of Surgeons, and Dr. Scott are now working on a machine that will by-pass the lungs as well. Experiments about which we know little, because little has been released about them, are being made in Russia on the problems of life and death. In 1940 surgeons at the All Union Institute of Experimental Medicine in Moscow killed a dog and pumped every drop of blood out of its body. The red blood cells were then separated and placed in a warm solution designed to replace the liquid part of the blood, and the new "blood" was pumped back into the dog, which came to life again. The entire operation took no more than four minutes and thirtyfive seconds.

This experiment endorses another carried out in Sweden. It proves that the whole body is not dead when life is extinct; and that under the right conditions the spark may be set in motion again.

In 1952 Professor Vladmir Negovsky, who performed some wonderful operations during the war, was awarded the Stalin Prize of 100,000 roubles for restoring to life twelve persons certified to be clinically dead. He and his associates did this by forcing blood into their veins within six minutes after death, which British, American and one Swedish scientist have now done. All this, you may say, is very interesting, but how does it help us?

It assists in this way; in addition to making the utmost use of the improved living conditions that prevail, and living as healtnily as possible, we should attempt to understand the structure of every part of the body.

Why does it break down? What can be done to arrest this disintegrating process? That is, apart from living a sensible, moderate existence.

We must go back to first causes; find out how the cells of the body are made, why they wear out, and how they can be replaced.

Dr. Serge Voronoff, whom a sensation-loving Press dubbed the "Monkey Gland Expert," and Dr. Alexis Carrel (as well as many lesser-known medical men) have done a tremendous amount of research on the subject and both came to the conclusion that natural death is an extremely rare phenomenon. Thousands of post-mortem examinations show that even when people died in extreme old age it was not old age as such that killed them, but in nearly every case lesions that had until then escaped observation were the cause of death.

Your body is composed of some sixty trillion cells (60,000,000,000,000) that are constantly wearing out and being replaced. In the most elementary types of matter these cells divide, and each forms a new cell, so that cell growth increases at an alarming rate, and these cells would soon cover the entire earth were it not for the countless enemies that prey on them.

The lower animals possess the faculty of rejuvenating themselves. Coral, for instance, which is an animal, continues to multiply till i. is several hundred miles long. If the fresh-water hydra (water snake) is chopped into bits, each piece will reproduce a normal hydra. Fresh-water worms, too, produce complete individual worms from portions of their bodies that are detached or cut away.

As animals develop they seem to lose this power of regeneration. The crayfish can only restore claws that have been torn off, the lizard only grows a new tail if the original one was severed. But when an animal develops into a species with organs and limbs for specific purposes, this former power vanishes. It is the price that Nature exacts for higher development.

The structure and nature of cell changes is most complicated in Man. His cells are also most easily destroyed, and are incapable of living an independent existence as are the cells of the lowest forms of life. They are interdependent on other cells, and the proper functioning of organs and glands.

Two processes are constantly at work: katabolism, or breaking down of tissues; and anabolism, or building up of tissue. In youth, cells are built up automatically as they break down.

The human body is comprised of different types of cells with differing functions. One type, the conjunctive cells, continues to invade the tissues as we grow older, and it is these that predominate in the bodies of people who die from physical atrophy and hardening of the arteries.

The brain ceases to function efficiently when the conjunctive cells drive out and overcome the cemebral cells, and we become doddery and gaga. As the brain controls the movement of limbs and the functioning of organs, these become slower and more irregular, and ultimately death supervenes.

Hardening of the arteries, or to give it the proper name, arterio-scler isis, is one of the most common causes of death; most people fall into its relentless grip when after 70 their movements grow slower and slower. They may not realize it, but a grim battle is being waged inside them, with the conjunctive cells winning a resounding victory over the nobler ones. And when the cell system is thoroughly disorganized, we collapse.

The problem that confronts us, then, is, "How can we fight off the advance of the conjunctive cells as long as possible?" for we know they can't be resisted for ever.

Many scientists have devoted their energies to this problem; none, so far, with success. The most they can do

is to stave off the evil day. Morgagni advanced the theory that disease is produced by changes in an organ; Bichat that it is caused by changes in the tissue of dissimilar organs; Virchow that disease is caused by changes in the cells themselves.

Cells have been kept alive in the laboratory far longer than they would have in the body from which they were excised. Chickens live for about four or five years, but their cells have been kept alive and multiplied under laboratory conditions for fourteen years. From these experiments scientists conclude that cells themselves are momortal and would continue to live indefinitely, provided that they were nourished and not interfered with by external or interpal forces.

As explained in the chapter on endocrine glands, these storehouses of chemicals regulate the functions of the organs, and affect the nerves, blood, brain and breathing. But the particular glands that most profoundly affect age, vitality and the power of the brain are the interstitials.

Hatha yoga is the only system of exercise that lays stress on gland functioning, and has movements and postures designed either to strengthen these glands or send a more generous flow of blood brough them. The three sitting postures, the bandhas, mudras and some of the asanas, affect these centres specifically.

Sane, moderate living, tresh air exercise, yoga breathing, concentration and meditation, and rough, fresh food grown in natural humus, all help to endow the body with vitality far beyond the normal span; but most important is the part played by the interstitial glands. If these wither, no matter what other steps are taken, old age will overcome you, even though you are young.

There is a case on record of a seven-year-old 1 by named Charles Charlesworth, born in Staffordshire in 1829, who

reached maturity at the age of four and grew whiskers, and died of all the signs of old age when he was seven.

A sane life strengthens and develops these glands and enables them to function well past the limit of middle age, which I place at 70. A life of riotous living, unless one is blessed with an extraordinary physical inheritance, will undermine health and reduce the power of these glands till you grow feeble and decrepit, and possess no more fight in you than a jackal, the most cowardly of all animals.

Incidentally, if a man is deprived of these glands or they lose their power, he grows old suddenly and with astonishing speed. What is worse, his brain ceases to function normally and he enters dotage.

But, as is the case with all other glands and organs, these do not work independently, but are parts—disproportionately important parts, perhaps—of the body; and ailments that afflict the body affect them, too. Which means that you cannot abuse any part of the body, or even the mind, without affecting every other part to some degree, and ultimately the spirit as well.

Dr. Serge Voronoff made a close study of the genital glands and proved by means of experiment that the secretions of the glands of men and animals (the hormones) are identical; and that the thyroid gland extract from a sheep, for instance, if injected into a man, will remedy his deficiency in the same way as if the hormone had been taken from another man!

There appears to be no difference, as far as one is aware, between human hormones and the hormones of some animals; the gland taken from an animal and grafted to a man acts in the normal way. A dog's thyroid has been instrumental in furnishing a human being with gland extract, and has enabled his brain to resume its normal function. This is a strong link in the chain of evolutionary proof;

and a smack in the eye for those who say there is no connection between human beings and animals.

Why animal hormones should produce normal results in human beings I do not know. It is merely a scientific fact proved by countless laboratory experiments.

It was on the strength of such information, and after countless experiments on animals, that Voronoff decided to graft the interstitials of animals into human beings, so that the victims of senility would gain in vitality when fitted with spare parts. And it worked!

Because he obtained his grafts from monkeys, as being Man's nearest dumb relative, Voronoff was called the "Monkey Gland Surgeon;" but few who tried to convert his life's work into a circus stunt understood what it was all about.

Later Steinbach, who thought along the same lines, devised gland extracts which had much the same effects as Voronoff's grafts. They were injected, and people much more readily took injections than operations. Many eminent men and women took the cure discovered by Professor Eugene Steinbach, and benefited enormously. Mrs. Gertrude Atherton, the famous novelist, was one of the few courageous enough to broadcast her treatment to the world.

At 64 she felt her powers leaving her and feared that she would never write another line, but after taking Steinbach's costly treatment she was writing as vigorously as ever at 77. That was fifteen years ago, and since then considerable progress has been made in the fight against scnile decay.

Unfortunately, the effects of gland grafting and injections wear off after from five to ten years, and must be repeated, each time with a shorter beneficial effect. Even so, the advance of the conjunctive cells can be retarded

for as long as twenty to thirty years—if you have enough money.

Recently I read with interest the claims of the Russian cytologist, Lepeshinskaya, who injects soda solution into the blood and takes soda baths—at 34 degrees Fahr.!—for twenty minutes at a stretch, to reduce fat and extend youth. But as the Russians state that there are 40,000 centenarians in the Ukraine alone, their claims should be taken with a large pinch of soda till more solid proof is available.

The yogis have a rejuvenating treatment known as kayakalpa, which means "a change of body and a new lease of life." It comprises fasting, meditation and a special diet. But it also means a journey to India, as the treatment is not available in Britain, and therefore is out of the question for all who lack wealth and leisure. On the other hand, the surya namaskars, which the Rajah of Aundh made compulsory in his state schools before the war, serve the same purpose. If one adds to them yoga breathing and meditation and lives a life of moderation, one may be certain of a long, peaceful life.

The Raj h of Aundh visited England when well over 70, but possessed the physique of a comparatively young man. He had worn spectacles; but his yoga eye exercises and the habit of sun and moon gazing enabled him to discard them.

He and the yogis achieve in a natural way what Voronoff, Brown-Sequard, Steinbach and others have accomplished by operations and injections. All are on the same track.

It is unlikely that Man will ever succeed in overcoming the process of tissue decay and thus achieving immortality, though that may eventually come about. I think it unlikely. It is probable, however, that most people reading these lines will like far longer than their ancestors and that the normal expectation of life will increase in our time to 100, and that really old men will live to be 150 or more.

Life may even be created in the laboratory, as Professor Haldane visualized when he wrote about his Ectogenic Baby; that is, a synthetic infant fertilized from a male cell in a test tube, under favourable conditions of heat and light. Various tubes will furnish it with the exact constituents of blood, and the condition in which it will grow will be as near as possible to those found in the womb of a warm-blooded animal.

The first modern to create life out of an inanimate object was Andrew Crosse, who experimented with rocks at Fynes Manor, Somerset. In 1837 he tried to make crystals by heating electrically a piece of iron oxide with hydrochloric acid and a solution of silicate of potash.

Little white pimples appeared on the rock and after twenty-six days grew to be the exact replica of insects. Two days later, they walked! Crosse wrote, "I have never in word, thought or deed given anyone a right to suppose that I considered them (the insects) as a creation. I have never dreamed of any theory to account for their appearance. It was a matter of chance."

Another scientist, Morley Martin, who died in 1938, claimed to have re-created—not created—life from the oldest types of rock—azoic. He heated the substance till it was reduced to cinders, and then subjected it to a number of operations till minute crystals, which he named "primordial protoplasm," were formed. Finally he magnified these crystals 3,000 times and those who peered through the eyepiece perceived thousands of minute fish wriggling about in them!

There is no reason why life should not be created from apparently lifeless matter like rock. According to the yogis there is no lifeless matter. Scientists tell us that inside the tiniest particles of matter there is incredible movement; and

if there is movement there must be some kind of energy to cause it; and that energy is the basis of all life.

Where does it come from? The yogis say it comes from the sun, and they seem to have been much in advance of their time, for that is what scientists say, too. Those who study the new science of Chemurgy—the word is derived from the Greek chemi, or Black Art; and "urgy," from ergon, the Greek word for work—know that all the energy in this world, and consequently all the matter, comes from the sun. Clear, almost colourless petrol, for instance, is refined from a thick, black, inflammable oil which lies thousands of feet under the earth's crust. It is the decayed residue of plants trapped millions of years ago in layers of rock; plants that got their life from the sun.

Almost every product can be made synthetically from something else. Henry Ford was laughed at when he said that motor cars would eventually grow on farms; but today a number of car parts—bodies, wheels, tyres, etc.—are made from plastic which once grew as soya beans, peanuts, or made from casein, extracted from milk. Dr. Frederick Bergius, the German chemist, provided wartime Germany with sugar from wood and butter from coal. Dr. George Washington Carver, the Negro scientist, produced 300 articles from peanuts!

Butter from an "inanimate" object like coal nourishes Man, so that there must be some form of life in coal.

Factories, like those at Billingham, produce fertilizers from the air. Matter appears to be interchangeable; and the secret of changing it from one substance into another seems to be largely of knowing how to alter the chain formations of atoms and molecules.

At present we can partly rejuvenate glands; in the near future we may be able to rejuvenate or replace worn-out cells, so that Man may prolong his span still farther. There are many problems to be tackled and we may count ourselves fortunate in being alive on the verge of revolutionary advances.

How strange it is that the centuries-old yogi creed that Man, the animals, birds, fish, trees, the earth, rocks and elements are one, is a theory that is slowly finding acceptance in the scientific world today.

#### CHAPTER XII

### HOW TO ATTAIN HAPPINESS

It you say to one of your friends, "Do you want to be happy?" he will probably stare at you in amazement, and if he knows you well enough, remark, "What a stupid question! Why, of course, everyone wants to be happy."

It is astonishing, then, that one finds so many people who are not; for happiness is the exception rather than the rule.

Most people don't really know what they want. They haven't given serious thought to the matter. Others don't know where to look for happiness. A great many don't know what happiness is. They mistake it for success, achievement or the piling up of money; for property or other material gain. Ihrilis and excitement, too, are sometimes confused with happiness.

Often people are happy, but don't realize their state as such, until years after they cast their minds back, and realize in retrospect that they were happy in the past.

Fven my dictionary is a trifle vague on the subject. "Happiness," it tells me, "is a state or condition of being happy; felicity," and when I turn to "felicity" I find that it means "contentment, blissfulness, prosperity."

"A contented mind" is perhaps the best all-round definition; a mind filled with that peace that passeth all understanding. When happy, your condition is reflected

in your face, actions, thoughts and attitude; and it is contagious.

First let us consider wealth, for in the minds of most people happiness seems to be connected with Money.

Few today have enough money, and the thought runs like a trail of fire through many a brain, "If only I could win £75,000 on the Penny Pools, all my troubles would vanish!"

But would they? After the Tax Collector has taken a fair slice all your relatives would expect substantial gifts, and the slightest show of normal caution on your part would be interpreted as meanness. You would buy a car, move into a larger house, and at one stroke lose your friends because they could not keep up with you. The acquaintances in your new sphere would consider you an upstart, for they'd all have as much or more money than you, and a phase of "keeping up with the Joneses," with all its attendant worries and responsibilities, would begin.

If you threw up your job you'd probably be bored to death after the first flush of excitement had worn off, and in order to preserve your sanity you would return to work, or start up in business. If you started in business without experience, you might leave up money and ultimately be much happier for the experience. I could quote you scores of examples where the winning of money has brought nothing but misery in its train.

It is easier by far to make money than to spend it wisely. That is why Patanjali's "Sutras," and all other yoga teachings, warn one to beware of amassing wealth.

But what about earning a great deal of money? Would not that make for happiness? Take a stroll through the National Portrait Gallery, or open any of the glossy society periodicals dedicated to the rich, and study the faces of the leaders of society. The cold, hard, sour expressions and the fixed smiles fill me with apprehension. They would curdle the milk drawn from the udder of the finest Jersey prizewinner.

Unless you are exceptional, the richer you are, the more suspicious you will become. Most very rich men suspect all the time that others, less well off, are trying to sponge on them.

I was reading Yesterday, the autobiography of Robert Hichens, author of Garden of Allah, and a score of romantic best sellers, who amassed a fortune and hobnobbed with kings. He knew the late Lord Astor well. Once, after a big luncheon, Astor complained to Hichens that when in London people ran after him perpetually for his money. "One gets to hate being looked on merely as a money bag," confessed Astor.

Women were always sidling up and begging him to contribute to their pet schemes. "I get su,d" he grumbled, "of the whole thing. I like to be allowed to give away money in ways I choose for myself. I don! like being dunned for money in public"

That, alas, is the fate of most very rich men.

Morey is a vehicle of exchange. It is meant to be spent, but most men with the gift of making money forget that, and merely use it to amass more

Remember that you can wear only one suit and one pair of shoes at any one time. Perhaps a few changes of clothes are necessary for civilized life; but when I read that King Alfonso XIII had 500 suits; that Indian rajahs and film stars travel with a hundred or more trunks of clothes, I feel nothing but pity for the poor peacocks.

How I envy the tramp who lived without possessions till he was 80. Then someone bequeathed him an armchair, and instantly his freedom was cuitailed. "All my life," he complained, "I roamed where I liked. Now I am a man

of property, and must sit in my chair on the towpath, looking into the Thames." That chair possessed him and threatened to rob him of his freedom, as property and possessions do to most people.

Mark Twain said he was never happier than when a poor, struggling newspaper man. In those days a religious lady of his acquaintance used to see him with a cigar box under his arm. "Mr. Clemens," she warned, "whenever I see you, you have a cigar box under your arm. You are smoking too much."

"It isn't that," said the writer, "I'm moving again."

When you tell reople that Aristotle said that money gives power, and that power corrupts, and absolute power corrupts, absolutely, they snort with derision.

In 1923 a 'oup of the world's most successful financiers met at the ewater Beach Hotel, Chicago. They were Charles Schwa President of the largest independent steel corporation in merica; Arthur Crutten, greatest wheat speculator in the land of the fice; Richard Whitney, President of the New York Stock Exchange; Arthur Fall, a member of President Harding's cabinet; Jesse Livermore, the biggest "bear" in Wall Street; Leon Fraser, President of the Bank of International Scutlement; and Ivan Kreuger, head of one of the world's greatest monopolies.

All were rich men, some multi-millionaires, and between them they had the power to play with countless millions of other people's money. If money meant anything, they should have been the happiest group of men on earth. Instead, they were scared and miserable, and each came to a sticky end.

For the last five years of his life Charles Schwab lived on a small pension from his friends, and died broke. Arthur Crutten's luck petered out and he died bankrupt. Richard Whitney served a term in Sing-Sing. Arthur Fall went to jail for the notorious Teapot Dome affair, and died soon after release. Jesse Livermore, Leon Fraser and Ivan Kreuger all committed suicide.

Lest you imagine that I am harping unnecessarily on the evils of money, let me state that I do not believe that the possession of money is in itse, an evil. But I agree with Paul when he says in his Fpistle to Timothy (chapter vi, verse 10) "For the LOVE of money is the root of all evil, which while some coveteth after, they have erred from the faith, and pierced themselves through with many sorrows."

Many who read this will say, "But, what rubbish! I merely wish to make the future secure." And that is where the trouble starts. Can one be certain of security? And security from what?

Matthew tells us, "Lay not up for yourself treasures upon earth, where moth and rust doth corrupt, and where thieves break through and steal.... Where your treasure is, there your heart will be also."

According to Dr. S. Radhakrishnan, Vice-President of India and former Spalding Professor at Oxford, those arch-compromisers, the British, have made an admirable marriage between the material and the spiritual, for he says, "British civilization is described as a composite of forces which can by symbolized by the cricket bat, the ballot box, the limited liability company and the Authorized Version of the Holy Bible."

Lack of financial security makes millions miserable; especially those who have suffered unemployment in the past, and with this fear hovering over them they cannot enjoy the day-to-day happiness that is everyone's right.

They have so great a fear of poverty that they spend years pinching and scraping, and denying themselves the smallest luxuries so that their old age may be passed in comparative ease. Often they die before they can benefit;

and even if the time arrives for them to retire, many have become so inured to a life of extreme thrift that it gives them agony to spend a farthing more than is necessary.

Others live in perpetual fear of disease they may never get. A recent Gallup Poll carried out in Norway to find out the disease that people feared most resulted in the following answers: cancer 54 per cent., tuberculosis 17 per cent., polio 3 per cent., rheumatism 3 per cent., 'flu 1 per cent. Five per cent. feared no disease; but 17 per cent. feared all!

Yoga philosophy, practical as well as theoretical, dispels such fears and their causes.

To be happy you must live for the present. Grasp each moment and squeeze the joy from it before it is gone. Cultivate a sense of proportion. Only today is real. Tomorrow may never come, and yesterday has gone for ever.

One spring morning George Santayana was lecturing his class at Harvard when he looked out of the window and saw the daffodils in bloom. For many years he had promised himself that some day he would walk out and enjoy such a morning, but the pleasure was always postponed.

That morning, to the astonishment of his students, he threw down his chalk, aid, "I have a date with Spring," walked from the room and never returned.

How often do we promise o rselves to do this or see that, but the years roll on with ut fulfilment? Don't put off some worthwhile experience now so that you may revel in a hypothetical pleasure at some distant date. The milk of that pleasure may sour through being kept.

Youth can be enjoyed by doing the youthful and sometimes silly things indulged in by the young. As you ripen with the years you will learn other ways of distilling the essence of life, till ultimately wisdom will soak into you like water into a sponge. Then the sober pleasures of reading, contemplation and discussion will take the place of the more exuberant and purely physical pleasures of youth. Don't shun any experiences, for they go to make the whole man or woman. When you have experienced them you will be tolerant of others, and a cultivation of tolerance is one of the ingredients of happiness.

I listen sometimes when people are asked on the radio, "What would you do if you had your life all over again?" Some of the replies are pathetic.

Say to yourself, "I have but one life to live. This is what I want to do more than anything else." Then, when you have decided that it is a good thing to do, do it with all your might.

Don't be turned from your purpose by kindly or well-intentioned relatives. If you don't do what you wish to in this life, your life and no one else's will be frustrated, and when you are old you will find that you have done few or none of the things you set out to do.

Sometimes it takes courage and strength of will to live the life you wish. Often it entails severe sacrifices. Frequently it means the difference between ease and struggle; plenty and poverty. Parents and relatives nearly always wish those near to them a safe life; a job with enough money and a pension at the end of it.

But it is your life and not theirs you will be living, and you must develop both your character as well as your abilities to cope with the obstacles that lie ahead. Some young people do not wish to hurt or offend kind and generous relatives. Others imagine they are being unselfish and self-sacrificing. But this attitude is weak and results from a desire to please and be thought well of.

Make a mat of yourself, and the world will wipe its boots on you.

Yoga teaches you to do away with false sentiment. It

strengthens your will, teaches you to think, decide for yourself, and act. It is the hard road, not the easy path. That is why so many do not finish the course.

Within limits you can do anything you set out to do; but before you place your feet on the path, make sure that your ambition will develop your character and make you happy. Do nothing your conscience tells you not to do. And remember that happiness and success can be two very different things.

As long as you live let your life be constructive. Not long ago the psychologist W. M. Marston asked 3,000 people the question, "W' at have you to live for?"

He was shocked to learn that 2,820 confessed that they were merely enduring life while they waited for "something to turn up." Others waited for children to grow up and leave home. Many waited for "the future," whatever that may mean. Some for a trip next year or the year after. Not one realized that today, now, this moment is what matters, because once it is gone it can never be recalled.

Enjoy today. Enjoy what you eat, the conversation of your family and friends; their friendship and love; the warnith of the sun on our back, or the fire round which you sit; the book you are reading; the music or play on the radio; the pipe you are smoking; all the good things round you. Savour them to the full.

Be kind to those who like you. You may not have the chance for long. Your wife's hands may look rough; but they have become roughened in your service. She may not look as pretty as when you married her but how would you remember her if she were dead? Do you ever think of these things?

Life was meant to be enjoyed, not regretted. It is impossible to be really happy unless you shoulder some measure

of responsibility and do some kind of work. The word "work" covers a multitude of occupations.

Although I have often wished for one myself, I know that one of the greatest curses in life is the possession of a small private income. The man with one often degenerates into a dabbler and dilettante.

I am not a lover of work for work's sake. In that respect I am like Abraham Lincoln, who said, "My father taught me to work, but not to love it. I never did like to work, and I don't deny it. I'd rather read, tell stories, crack jokes, talk, laugh—anything but work."

There is no point in carrying stones from A to B, as they make men do in prison, and then cart them back from B to A. Nor is there much fun in routine work, unless you happen to like that sort of labour.

Try to do what you are best at; it doesn't matter if you spend a few years finding out. It's much better than being in the wrong job. But it means effort and strength of character to break away from a planned existence.

Everyone enjoys doing something, and if you can get paid for doing that, so much the better, for then you will do it willingly and well.

Don't hesitate to take a job at something uncongenial if at the end of a few years you will be in a position to do the work you love. It will be worth much toil, sweat and tears, for the moment you begin doing what you like, your foot is placed firmly on the ladder to happiness, and perhaps success, too.

If you do a job that you love, and one that is more in the nature of a hobby than work, you will look forward to Monday morning and have a much greater chance of getting to the top. Misfits, the square pegs in round holes, are to be pitied, even if well paid.

The son of a friend of mine won a gold medal and a

scholarship for musical composition, and wished to take up a musical career. His parents considered engineering a much sounder vocation than the precarious life of a musician, and apprenticed him to a firm of engineers. They might just as well have sold him into slavery, for he was as much in chains as a galley slave.

Then came the war and happy release. He joined the R.A.F., became a member of the unit band, and when the war ended began to make a living as a musician and composer in civil life. He may have made more money as an engineer; but as a musician he lives.

One third of your life—possibly more—is spent at work, so why make it miserable? If you live to be only 60, then at least fifteen years will be spent in abject misery. The idea appals me. Yet millions live and die in chains. No wonder war comes as a relief to many.

The task of putting the right people into the right jobs should be tackled on an international scale, and until that is done, nations will always find men so bored and frustrated that they are willing to kill each other. A friend of mine worked for his father, and hated every minute at the office. As an escape he became a Territorial and was delighted when war came, for he became a to the day when he could go over the top! How different would have been his outlook had he loved his job.

I exchanged engineering, at which I would doubtless have made an excellent income, for the prospect of starvation as a free-lance writer. That I have not starved to death is merely a fortunate accident, but I have experienced more than twenty years of happiness doing what I want, and what is more, being paid for doing so, a fact that never fails to astonish me!

So here we have two of the most important ingredients of happiness: work, and the work you like.

Idleness results in boredom—unless you're a moron. Doing what you detest is slow murder. A promising sculptor I know works in a bank. Fingers that should be creating beauty are used to tot up rows of figures and flick piles of notes. May the day come when that man can relinquish a regular income and a marble prison for the precarious life for which he is fitted, and the joy it will bring.

There is tremendous satisfaction in doing a job well, and that can be accomplished only if you love your work. No man should take up teaching, for instance, unless he is prepared to make every lesson as fascinating as possible, so that the dullest child will be interested. If he is not prepared to do that, he should seek another profession.

The yogis say that a "compleat" life is composed of a multitude and variety of experiences. True happiness can never be thoroughly enjoyed unless you have also experienced sorrow; wealth cannot be appreciated unless at some time you've been in want; nor true health unless you've ailed. They say that it is impossible for any person in a single life to suffer and enjoy every experience, and that is one reason for their belief in reincarnation. Only after being re-born many times and experiencing an astonishing diversity of fortunes can one achieve perfection. There is possibly a good deal in the theory.

Hard physical work, too, has its delights. An editor I know, who never did a stroke of manual work in his life, told me he didn't know he had a body until he joined the Army and went on a succession of P.T. courses to toughen him up for D-Day. For the first time in his life his muscles ached at the end of the day and he threw himself on his pallet each evening to fall into a coma instantly. Before, he used to coax sleep with pills.

All engaged in sedentary work should try to do some manual labour: digging in the garden, a little carpentry, or

jobs about the house, like distempering or papering. Your whole body is meant to be used: mind and muscles.

How can you enjoy food unless you've worked up an appetite? To eat just because the clock informs you that it is lunch- or dinner-time is one of Man's most ridiculous customs. Work hard; get up a sweat; miss a meal—two meals—a whole day of meals—and then see how wonderful food tastes.

The gourmets of old knew this and prepared themselves for the banqueting table like a runner for an Olympic ordeal. They trained by fasting, for after a short fast the organs of digestion are better able to cope with food, and the taste buds grow more sensitive. History tells us that Guillaume Tallevant (1315-95), chief chef to Charles V and Philip VI of France, author of the first European cookery book, loved his food better than his wife. He always fasted before banquets and once laid off all food for ninety days; but when he ate, his gastronomic feats astounded all. And he lived to the ripe age of 80.

After Lent all true believers turn to their victuals with sharpened appetite, except those devout Catholics who do a little cheating on the side, consoling themselves with the words, "Le bon Dieu regarde pas d'aussi près" (the good God doesn't look too closely). In the Middle Ages many used to eat duck in Lent excusing themselves by saying that as it lives mainly in the water, technically it is fish. And this fiction, if we are to believe the *Manchester Guardian* of November 13th, 1951, is maintained, for according to the Pope's ruling the flesh of any animal living predominantly in the water, such as whale-meat and hippo flesh, is permitted to be eaten by his flock on abstinence days, though surprisingly enough this does not apply to aquatic fowl. Yogis don't resort to such logic.

If I were given a pound for each occasion on which I've

heard a well-to-do man say, "I was never happier than when I had to work sixteen hours a day on three and sixpence a week," I'd be a rich man. They always add, as they take a sleeping pill, an aspirin or a digestive tablet, "Ah, I could sleep like a top in those days, and eat like an ox." The cure is in their own hands, but they will not take it.

It was Oscar Wilde who said, with considerable truth, "Work is the curse of the drinking classes."

They remind one of Archdeacon William Paley, who ranted about the discontent of the working classes in his discourse, Reasons for Contentment; Addressed to the Labouring Part of the British Public, 1793. "The necessities which poverty imposes are not hardships, but pleasures. Another article in which the poor are apt to envy the rich is their ease. Now here they mistake the matter totally. Rest is a cessation from labour. It cannot, therefore, be enjoyed or even tasted, except by those who have known fatigue. The rich see, and not without envy, the refreshment and pleasure which rest affords to the poor."

There is more than a grain of truth in that priceless piece of sophistry.

I value health very highly; but it is not an essential ingredient to happiness. Many who abound in vitality are as miserable as virtue. Others who are crippled, paralysed and chronic invalids, are extraordinarily happy. They master their physical disabilities and, in a limited sense, are healthy. They forget their handicaps, just as the truly healthy can forget their bodies.

Don't imagine that the massive mountains of flesh and muscle one sees posing in the Sunday newspapers, flexing their biceps for the admiration of lovely women, are healthy. With marcelled hair and bodies gleaming with oil, they simply can't get away from their bodies; and few

of them realize that either mind or spirit exists. The last thing they seem able 10 do is to forget their bodies!

In this chapter I have merely touched the fringe of a subject that has occupied the thoughts of philosophers for centuries.

I cannot give you the answer to many of the questions you will pose after reading this book. You are the only person able to do that.

You know your body, mind and the reasons for all your actions. But if you follow the practical instructions I have given, for breathing, exercise and eating; if you use your mind as an instrument to think with, and your conscience as a compass to direct you in the *right* path, then you will be both healthier and happier than before taking up this book.

Realize that there is no state of permanent and static happiness. You may be happy today, but tomorrow problems will confront you and obstacles be placed in the path of that happiness. Think about and conquer them, and with each conquest your character will grow stronger—but not ruthless—and each victory will add to your spiritual development.

You may not agree with many of the conclusions I have reached. Perhaps you're right and I am wrong. There are so many facets to each problem that I hesitate to be dogmatic. But whatever you do, use your mind to think with; it will sharpen with use. Don't agree with anything that does not appeal to your reason. Continue throughout life to question, probe and find out for yourself.

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